

MUNICIPAL WASTEWATER TREATMENT

Kaw Point & Plant 20

KANSAS CITY, KS



KANSAS CITY



The Challenge/Problem

Steve Leiker, Operations Manager for the KAW Point (30 MGD) and Plant 20 (15 MGD) domestic wastewater treatment plants in Kansas City, KS, was facing major odor issues with biosolids from both WWTPs.

- Biosolids were creating major odor issues at the landfill and the municipality was threatening to shut the landfill down
- As a result, the landfill stopped receiving biosolids for disposal
- Both WWTPs were then forced to use an out of town landfill - which meant much higher trucking and disposal costs
- Also, odor issues were causing widespread complaints at both WWTPs
- Other products that both WWTPs had tried, did not work, were toxic to the biological processes, and resulted in pipe and equipment corrosion at both facilities

Treatment Plan and Execution

WWTP operators from the facilities contacted SciCorp and requested assistance. The WWTP operators worked with the SciCorp engineers and developed a treatment approach to solve the odors and to reduce the biosolids that were being generated.

- ✓ SciCorp recommended adding BIOLOGIC™ SR2 to the sludge prior to the dewatering process. This resulted in removal of odor from the biosolids and the entire plant as the supernatant from the dewatering process was reintroduced to the headworks of the facilities.

Success

Shortly after implementing the SciCorp treatment process, testing confirmed that biosolid odors had been eliminated from the sludge cake and the landfill agreed to resume receiving solids from both facilities.

Other long-term benefits included:

- H2S in the biosolids was reduced from 200ppm to below 5ppm
- The mass of biosolids being sent to landfill for disposal was reduced by 25%
- A significant reduction in WWTP operating costs
- Odor complaints at the landfill resulting from the biosolids were eliminated
- Odor complaints from workers and neighbors at both WWTPs were eliminated

Problems Avoided

As a result of their partnership with SciCorp both WWTPs were able to avoid:

- High costs associated with disposal of their biosolids at a remote out of town landfill
- Odor complaints and regulatory enforcement
- Negative health impact on employees caused by odors in the working environment
- Corrosion to piping and equipment and toxic inhibition of biological processes