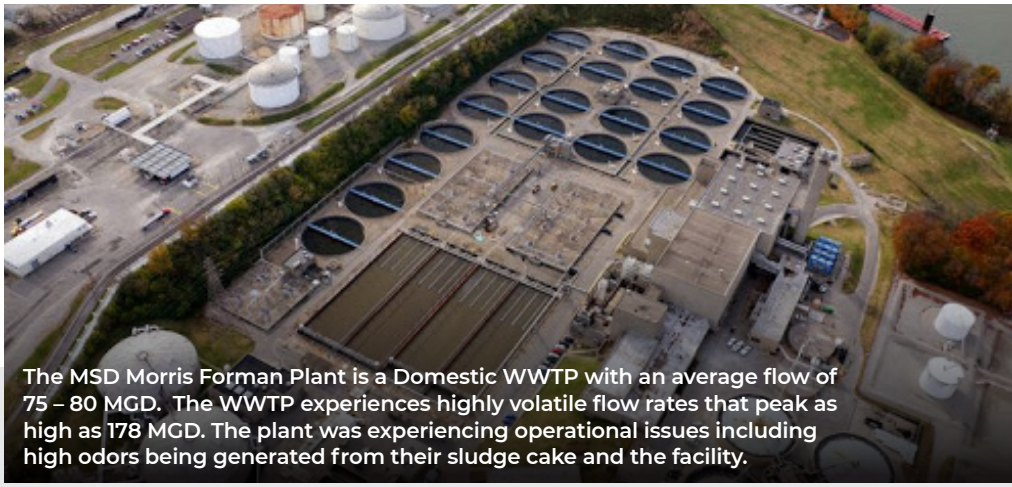
We Solve Odor!

Take Back Control Of Odors At Your Facility
Increase Plant Capacity / Reduce Operating Costs

MUNICIPAL WASTEWATER TREATMENT

MSD Morris Forman Wastewater Plant

Louisville, Kentucky



The MSD Morris Forman Plant is a Domestic WWTP with an average flow of 75 – 80 MGD. The WWTP experiences highly volatile flow rates that peak as high as 178 MGD. The plant was experiencing operational issues including high odors being generated from their sludge cake and the facility.

The Challenge/Problem

The local Waste Management landfill had restricted the amount of sludge it was willing to receive from Morris Forman 145 MGD WWTP due to the amount of odors coming from the sludge.

In addition, the highly volatile flow rates to the wastewater plant were causing plant upsets leading to poor effluent quality, odor issues inside the plant, unmanageable sludge generation and high operating costs.

Issues included:

- Odors being generated in the WWTP and in the sludge cake shipping to the landfill
- Problems with treated effluent quality
- Increase energy consumption and operational costs caused by excess volumes of sludge

SciCorp Treatment Plan and Execution

The management of the WWTP reached out to SciCorp engineers to explore treatment options. SciCorp engineers reviewed the plant operating data and proposed that BIOLOGIC™ SR2 be added on a continuous basis at three locations in the plant:

- ✔ **The headworks of the facility**
- ✔ **At the sludge flow to the DAF**
- ✔ **At the digester feed**

Success

Following a six month treatment project BIOLOGIC™ SR2 achieved the following results:

- Eliminated odors from sludge being shipped to the landfill which resulted in the landfill lifting the limitations on receiving sludge from the Morris Forman Plant
- Eliminated odors in the plant facility (public complaints were eliminated)
- Sludge generation normalized for organic load was reduced by 40%
- Primary clarifier BOD/TSS removal efficiency increased by 80% in the primary clarifier and by 24% in the secondary clarifier
- Overall oxygen consumption decreased by 32%
- Biogas production increased by 60% as loading to the digesters increased by 7% during the study period
- Plant effluent NH3 levels dropped by 34%

Issues Avoided

By working with SciCorp, the plant operators were able to help the facility avoid:

- Limitations placed on the WWTP by the landfill regarding acceptance of sludge
- Regulatory enforcement associated with odor complaints and effluent discharge concentrations
- Damage to the company brand in the community

www.SciCorp.net

Contact our Engineers:
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