

SYSTEM STUDY: Republic Services – McCarty Landfill (Houston, TX)



FAST FACTS

Project:

- ✓ Containerized bioFAS™ MBBR/DAF System for Landfill

Industry:

- ✓ Landfill Leachate

Application:

- ✓ COD reduction
- ✓ Ammonia oxidation

Problem:

Increasingly stringent ammonia discharge requirements threatened to put the landfill out of compliance with its Municipal discharge permit.

Solution:

bioprocessH₂O supplied a three-stage, containerized bioFAS™ MBBR system to reduce COD and ammonia, keeping the landfill in compliance. bioprocessH₂O supplied the ancillary equipment (DAF unit, compressor, control panels, etc.) in a shipping container to expedite the installation process.

Status/Results:

The bioFAS™ MBBR system effectively removes ammonia by >95% and meets the discharge permit requirements. The use of mobile frac tanks and containerized equipment allows for potential relocation of the treatment system. Additional details can be provided by bioprocessH₂O.

bioFAS™ MBBR System Design Criteria:

Parameter	Influent	Effluent Requirements
Wastewater Flow	20,000 GPD	-
COD	8,000 mg/L	-
Ammonia-N	1,700 mg/L	<700 mg/L

SYSTEM BENEFITS/HIGHLIGHTS:

- ◆ Compact footprint
- ◆ Modular/Mobile design
- ◆ Simple operation
- ◆ Minimal operator maintenance

Contact bioprocessH₂O today!

