

## SYSTEM CASE STUDY: Golden Triangle Landfill – Texas



### FAST FACTS

#### **Project:**

- ✓ bioFAS™ MBBR System for Landfill Leachate

#### **Industry:**

- ✓ Landfill Leachate

#### **Application:**

- ✓ Biochemical Oxygen Demand (BOD) Removal
- ✓ Nitrification of Ammonia

### **bioFAS™ MBBR System Benefits/Highlights:**

- ◆ Efficient reduction of BOD
- ◆ Ideal for high and varying loads
- ◆ Cost-effective
- ◆ Compact footprint & modular
- ◆ Easy to operate & maintain

### Problem:

Golden Triangle Landfill was experiencing high concentrations of ammonia and BOD in the leachate from their domestic landfill.

### Solution:

**Phase 1:** bioprocessH2O supplied a two-stage bioFAS™ MBBR biological treatment process designed for BOD reduction and nitrification of ammonia. The installation allowed the landfill to meet the new regulations as well as plan for expansion.

**Phase 2:** Increased the system's nitrification of ammonia capacity with the addition of a third bioFAS™ MBBR Bioreactor operating in series.

### Status/Results:

The bioFAS™ MBBR System effectively biodegrades the BOD and nitrifies ammonia to compliance standards for direct discharge.

### System Design Criteria:

Parameter	Phase 1: Influent	Phase 2: Influent	Effluent
Wastewater Flow	25,000 GPD	25,000	NA
BOD	≤50 mg/L	≤50 mg/L	≤30 mg/L
TSS	≤500 mg/L	≤500 mg/L	NA
Ammonia	≤250 mg/L	≤500 mg/L	≤35 mg/L

**Contact bioprocessH2O today!**

