

SYSTEM CASE STUDY: Boxborough, Massachusetts



FAST FACTS

Project:

- ✓ bioPULSE™ MBR System for Decentralized Wastewater Treatment

Industry:

- ✓ Decentralized Wastewater Treatment

Application:

- ✓ Biochemical Oxygen Demand (BOD) Removal
- ✓ Total Suspended Solids (TSS) Removal
- ✓ Total Nitrogen Removal

bioPULSE™ MBR System

Benefits/Highlights:

- ◆ Fully automated MBR process
- ◆ Low energy consumption
- ◆ Title 22 Certified
- ◆ High flux rates – small footprint
- ◆ Back-pulsed to enhance and sustain flux

Problem:

The wastewater discharged from the Boxborough development had to meet the MA DEP Groundwater Discharge Permit requirements for BOD, TSS and Total Nitrogen.

Solution:

bioprocessH2O supplied a bioPULSE™ Airlift Membrane Bioreactor (MBR) system that utilizes external tubular energy efficient membranes to achieve the treatment goals.

Status/Results:

The bioPULSE™ MBR has proven effective at consistently exceeding the MADEP permit limits.

System Design Criteria:

Parameter	Influent	Effluent
Wastewater Flow	39,930 GPD	-
BOD	300 mg/L	<30 mg/L
TSS	300 mg/L	<30 mg/L
Total Nitrogen	65 mg/L	<10 mg/L

Contact bioprocessH2O today!

