

Membrane Bio-Reactor technology is the fastest growing solution to meet more stringent wastewater discharge requirements and water reuse applications

The BluBox MBR team Is focused on solving today's challenges with meeting stringent effluent wastewater standards

Parameter	Conventional Effluents	Water Reuse Standard	MBR Performance
TSS	25 - 50 mg/L	< 2 mg/L	~
Turbidity	10 - 30 NTU	< 2 NTU	<b>v</b>
BOD	25 - 50 mg/L	< 2 mg/L	<b>v</b>
TDS	N/A	< 500 mg/L	N/A
Nitrogen	10 - 30 mg/L	< 10 mg/L	<b>v</b>
Phosophorus	1 - 30 mg/L	0.1 - 2 mg/L	<b>v</b>
Coliforms	10 -10 cfu/100 ml	< 2.2 # /100 ml	<b>v</b>
Virus/Potozoa	2.5 / 2 log	Regional	5 /6 log

# **Compliance of MBR permeate with**

- California Title 22 Code of Regulations
- □ TCEQ section 210 reuse standards
- NMED Class 1A
- □ WHO standards for unlimited irrigation









# The BluBox MBR system encompasses proven design and operational experience to deliver the best MBR system solution in the market today.

The guiding design principles for a BluBox MBR wastewater treatment system includes the following criteria:

- 1) self-contained system to ensure simplicity
- 2) minimize design, process and site engineering to minimize costs
- **3)** modular in design to facilitate easy expansion for multi-phase projects
- 4) designed to offer short- term rental and leasing options by BluBox

BluBox MBR is an integral component of the turnkey MBR wastewater treatment system to ensure discharge compliance across a diverse range of influent and effluent parameters.

### Typical BluBox MBR influent and effluent specifications:

Design Flow	70,000	gpd		
BOD	250	mg/l	5	mg/l
TSS	250	mg/l	5	mg/l
TN	60	mg/l	10	mg/l
Design Temp	12	С		

Plant treatment capacity may be de-rated accordingly to meet limits for higher strength organic wastewater.





## The BluBox MBR Advantage...

### Performance

System provides exceptional permeate quality to comply with restrictive discharge standards and provide water reuse as needed including nitrogen and phosphorous removal.

#### Scalable

The BluBox MBR system is easily expanded with additional modular units to address future expansion.

#### Intelligent Remote Monitoring -

System features sophisticated sensors and advanced telemetry supported by personnel for remote 24/7 monitoring and diagnostics.

#### Compact Footprint

Exceptional engineering design delivers a compact MBR unit to conserve valuable real estate.

#### Fast Delivery

Standardization and manufacturing from our Texas-based MBR Tech Hub allow us to deliver systems within 4-6 weeks, depending on inventory, and build new units in 14-20 weeks.

#### Minimal On-Site Construction -

BluBox MBR is pre-plumbed, pre-wired and undergoes factory testing to minimize design engineering, project management and on-site construction resulting in lower costs and faster project response time.

#### **Regulatory Compliance**

The system meets/exceeds the majority of regulatory standards including redundancy of all major components to ensure compliance.

#### Cost-effective

The leader in construction, fabrication, assembly, automation, startup, and ongoing technical support.

#### **Operator-Friendly**

Control, instrumentation, automated CIP and chemical feed system instrumentation are optimized for easy servicing and minimal operator attention.

#### Rental and Leasing Option

Short-term, rental and leasing