



a division of Eimco Water Technologies



Pre-Engineered  
Enviroquip® MBR Systems



### Why decentralize wastewater treatment?

- High sewer costs
- More cost effective
- Shorter planning horizon
- Reduced odor issues
- Greener approach to treatment
- Sustainable development

### What is an MPAC® system?

- A pre-engineered Membrane Bioreactor (MBR) System
- A complete solution to your wastewater treatment needs

### Why use MBR technology?

- Reduced, eco-friendly footprint
- Ease of operation and maintenance
- Robust, reliable treatment
- The best available technology for wastewater treatment

### Why is the MPAC® system the best solution:

- Modular, pre-engineered designs

- Single-source responsibility (SSR) for complete systems
- Integrates Kubota® membrane products used in over 2,500 installations worldwide
- Comprehensive warranty plans for total system coverage
- Industries leading technical support packages (EQuipTech™)
- Remote operation capabilities comes standard (EQLogix™ SCADA)

- Process Warranty (all permit requirements)

### EQuipTech™ service plans

Service plans are tailored to meet the needs of each customer and can include:

- Online, real-time 24/7 technical support
- Remote monitoring and optimization
- Access to a network of certified regional technicians
- Reduced field service rates

### Warranty options

- Energy Guarantee (total usage)
- System Warranty (all components)

Treated Effluent Quality		
Parameters	Typical Values	Achievable Values
BOD <sub>5</sub>	<2.0 mg/l	Not Detectable
Total Nitrogen (TN)	<10.0 mg/l	<3.0 mg/l
Ammonia (NH <sub>3</sub> )	<1.0 mg/l	<0.3 mg/l
Phosphorus (TP)	<1.0 mg/l	<0.03 mg/l
Fecal Coliform	<2.2 CFU/100 ml	Not Detectable
Total Suspended Solids (TSS)	<2.0 mg/l	Not Detectable



1



2

#### 5,000 GPD, CA (1)

Treatment plant completely contained within a building

#### 30,000 GPD, OR (2)

Treatment plant installed in basement of LEED Platinum Certified building



3

#### 125,000 GPD, TX (3)

Treatment plant installed outdoors for reduced cost and easy access

#### 25,000 GPD, OH (4)

Treatment plant partially enclosed in a building (equipment only)



4

The Enviroquip® MPAC® system is a complete treatment system, combining several operations into one fully functional wastewater treatment plant. The MPAC system is ideally suited to a wide range of applications including: Housing Developments, State Parks, DOT Rest Areas, Tribes, Shopping Malls, Golf Courses, Resorts, Casinos, Sewer and Water Districts.

## Standard scope

Each MPAC model (LC or HC) comes equipped with all of the components, tankage (steel or concrete) and process zones necessary to form a fully functional state-of-the-art MBR system including:

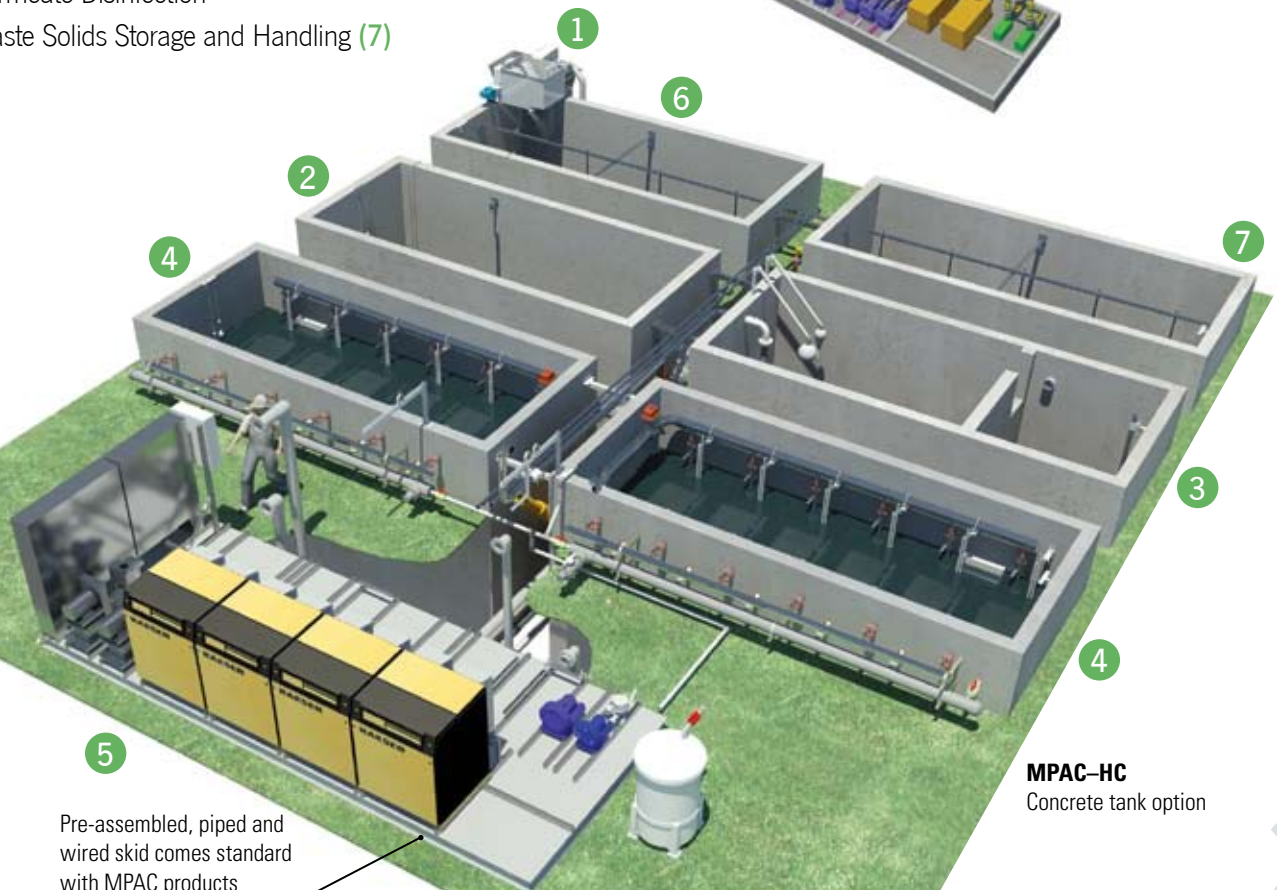
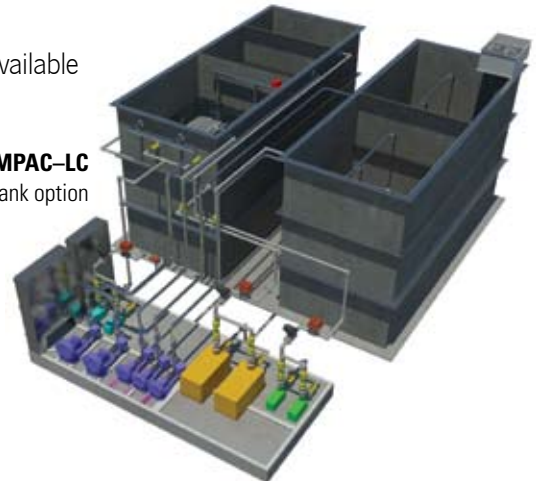
- ✓ Fine Screening (1)
- ✓ Anoxic Zone (2)
- ✓ Pre-Aeration Zone (3)
- ✓ MBR Zone (4)
- ✓ Equipment Skid (5)
  - Control Panels (EQLogix SCADA)
  - Aeration Systems
  - Recycle and Permeate Pump Systems

## Options

Depending on the specific needs of an application, several options are available to tailor the capabilities of an MPAC system. These options include:

- Winterization Packages
- Screening Pre-treatment
- Equalization Systems (6)
- Chemical Dosing Systems
- Permeate Disinfection
- Waste Solids Storage and Handling (7)

**MPAC-LC**  
Steel tank option



**MPAC-HC**  
Concrete tank option

Pre-assembled, piped and wired skid comes standard with MPAC products (skid piping not shown)

# MPAC systems can be

Hidden in plain sight™

*"After operating conventional plants for over 20 years, I'm still amazed at the consistently high effluent quality produced by the MPAC system." –Bob Thurston, Operator*



**Is an MPAC system right for my project? Yes.**

- Fast delivery
- Complete scope of supply
- One number to call for service and support
- Easy to operate and maintain
- The best available technology for wastewater treatment
- Approved for reuse applications



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