

CONTAINERIZED MEMBRANE BIOREACTOR

PORTABLE **RELIABLE** FULLY AUTOMATED H₂O Innovation's Containerized Membrane Bioreactor (CMBR) systems are stand-alone wastewater treatment plants designed to handle the most extreme environments. These systems are fully integrated within a standard hi-cube shipping container to allow simple transportation to your location and robust protection of the system.



SYSTEM DESIGN

Our CMBR systems are designed based on proven membrane bioreactor treatment technologies that provide superior effluent quality using a simple and reliable flow scheme in a very compact footprint. All of our designs are run through an industry-standard wastewater modeling program to guarantee your effluent requirements are achieved. Wastewater flows into our systems through a fine screen that removes trash, hair and debris. The screened wastewater is equalized by our integrated equalization tank to overcome natural flow fluctuations. Naturally occurring bacteria are concentrated in the biological reactor and consume the wastewater as it enters the system. The membrane filters separate the bacteria and suspended solids and only allow treated water to pass through as effluent.

APPLICATIONS

- Remote worker camps
- Recreational campsites
- Rest stops
- Small communities
- Temporary installations

TYPICAL EFFLUENT

- BOD < 5 mg/L
- TSS < 2 mg/L
- AMMONIA < 0.5 mg/L
- PHOSPHORUS < 0.5 mg/L
- FECAL COLIFORMS < 200 CFU/100 ml (with UV option)



CONTAINERIZED MEMBRANE BIOREACTOR FEATURES



CONTROL ROOM separated from mechanical room to provide a clean and safe working environment

MECHANICAL ROOM containing blowers and screen where solids can be safely handled.

FULLY REDUNDANT PROCESS BLOWERS allow maintenance while system remains in operation