



Newsletter

Volume 17 | April Issue

Benefits of MBRs

**High quality
effluent**

Small footprint

**Consistent
effluent quality**

**High volumetric
load possible**



Membrane Bioreactor

(MBRs) square measure a kind of secondary effluent treatment technology that mixes membrane filtration with biological treatment. Newer and customarily dearer than typical biological treatment choices, MBRs have historically been reserved for smaller scale effluent treatment applications. Since the late 1990's, however, MBR use has been on the increase at facilities of all sizes.

So however do MBRs compare to traditional effluent treatment technologies? during this article, we'll justify the foremost edges and downsides of MBRs for municipal effluent treatment applications, and explore however MBR technology may suit your municipal effluent treatment desires.



Drawbacks of MBRs

While MBRs provide some nice edges, they've got a number of downsides too. In short, the most disadvantages of MBRs square measure higher price and bigger operational complexness compared to traditional activated sludge systems, as elaborate below.

Cost

Perhaps the largest disadvantage of MBRs is their high capital prices and high operational prices relative to traditional effluent treatment technologies. These prices will principally be attributed to the price of membranes, energy for pumping and aeration, and proficient labor for operations and system maintenance

Operations and maintenance demands

One of the foremost important expenses related to Associate in Nursing MBR is that the membrane component. whereas all membranes can degrade over time and eventually need replacement, correct care and maintenance of the MBR system is crucial as a method of preventing fouling—and maximizing cost-effectiveness for the MBR system as an entire by extending the lifetime of the membrane component.

