

# Advanced Treatment Units

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## **MBR system saves business on sewer bill**

**Problem:** Faced with a 1,320-foot distance to connect to the centralized wastewater treatment system, the owner of a commercial storage facility in central Bradley, Illinois, began exploring decentralized options. To gain decentralized system approval, the village required installation of a NSF 350 certified water-recycling system to accommodate the flow from restrooms and other facilities for office workers.

**Solution:** Ray Tebo of New Excavating Technology Inc. designed and installed a complete wastewater treatment system including a Bio-Microbics .5 (500 gpd) BioBarrier Membrane BioReactor installed within an Infiltrator Water Technologies IM-1060 tank. The modular MBR system uses advanced technology to produce recycled water. The tank offers strength in a lightweight and easy-to-transport design. The system had an Infiltrator IM-540 lift tank, followed by another IM-540 tank with a 1/16-inch SaniTEE for solids retention. The BioBarrier is followed by a 2- by 10-foot EZflow 1202GEO drainfield installed at the precise location where a double-ring infiltrometer test was conducted to test the hydrologic conductivity of the soil. The recycled water is then dispersed at .5 gpm for process control. An Aquaworx IPC duplex control panel controls the Champion pumps. The total footprint of the system is 8 by 40 feet.

**Result:** The system provides effective wastewater treatment, meets town regulations and so far has resulted in more than a \$100,000 savings for the property owner when compared to connecting to the centralized sewer connection....