

Engineering Clean Water Solutions

WavTex[™] Installation

Peterborough, Ontario

In September 2011, Peterborough, Ontario installed a Moving Bed Biological Reactor (MBBR) system that significantly improved both the performance and capacity of their 18 million gallon per day (MGD) wastewater treatment system. Unfortunately, as has been the case with similar rigid media systems, the media began to break and pass through their retention screens.

The staff proactively began to search for a solution, hiring R.V. Anderson to provide consulting engineering services. They recognized that they needed another attached-growth biological system to provide the necessary biology in the basins but needed one with no potential risk of media breakage or washouts.



Left: WavTex modules installed over fine bubble aeration

They quickly settled on Entex's WavTex hybrid media system. The EnTextile[™] media sheets in the WavTex modules replace the biological surface area of the MBBR system, but with their resilient, flexible structure and one edge firmly tethered to the support modules, there is no risk of either media breakage or washout.

In September of 2021, the first of the four treatment trains came online with the WavTex modules installed. We'll keep you informed of progress as we bring all four trains online and watch the performance through the Canadian winter.



EnTextile sheets floating as basin is filling

WavTex system in operation

Application

Failing 18 MGD MBBR system

Entex Solution

Replace MBBR with Entex WavTex™ System (32 WavTex modules total, 8 per train)

Effluent Limits

- NH₃-N < 5 mg/L (winter)
- NH₃-N < 3 mg/L (summer)