TECHNOLOGIES PREMIER TECH

# **Membrane Bioreactor**



## A Community in the Heart of the Whitlock Golf Course

### **Client:** Whitlock West Homes, QC, Canada

Just minutes from Montreal and renown throughout Quebec as a peaceful, almost idyllic, place to raise a family or retire, Hudson is a tranquil suburb with a rich and rewarding community life. The region is also known for its breathtaking golf course, popular with expert as well as novice golfers for close to a century. Surrounded on all sides by the fairways, the 43 semi-detached and single-family homes of Whitlock West had to meet strict environmental standards and have minimal impact on the local environment.

#### **Context**

As the wastewater treatment plant of the town of Hudson was not close to Whitlock West and had already reached full capacity, effluent from Whitlock West homes had to be discharged into the storm drainage system. The municipality, however, had upgraded its requirements to ensure complete decontamination (phosphorus removal).

The municipality's construction specifications also included detailed clauses regarding measures to reduce environmental impacts. Whitlock West's main objective was to preserve the natural beauty of this unique site for generations to come. Whereas the town of Hudson currently allows clearing of up to 50% of the trees on a residential lot, only about 20% were cleared, on average, from lots at Whitlock West.









### Challenge

A wastewater treatment solution able to meet the following conditions was thus required for Whitlock West:

- · Compliance with strict environmental standards for phosphorous removal
- Superior treatment performance at the lowest possible cost
- Maximum preservation of the natural beauty of the site (good integration with the environment)
- Compliance with clearing regulations (small footprint)
- Minimum risk of nuisance (noise and odours)

Effluent quality requirements

P <sub>tot</sub>	<0,1 mg/L
Fecal coliforms	<200 CFU/100 mL

"Increasingly, contractors will be expected to comply with stringent environmental standards. With its outstanding treatment performance and relatively low cost, the Ecoprocesss™ MBR made our project possible."

#### René Schubert

General Manager Whitlock West, Hudson, QC

#### Solution

Membrane technology is at today's cutting edge in terms of phosphorous removal efficiency. Thanks to its small footprint and outstanding performance, the Ecoprocess™ MBR eliminates the need for a discharge channel, once again considerably reducing costs compared to other technologies.

With its superior performances at lower cost, the Ecoprocess<sup>™</sup> MBR membrane technology marketed by Premier Tech Agua proved to be the only solution that could meet the developer's requirements.

Building plans for this solution were drafted by Marchand Houle and Associates, eliminating the need for costly work by Mont-Tremblant contractor Excavation R.B. Gauthier Inc.

The new Ecoprocess<sup>™</sup> MBR system of Whitlock West Homes, which can treat up to 70 m³/d, was commissioned in September 2011.



**1800 632-6356** 

