

CASE STUDY



MABR

MABR product solution implemented at Moshav Ha'Yogev wastewater treatment plant

Background

HaYogev is a residential development in the rural area of Jezreel Valley, with 1000 homes, agricultural fields and dairy farms. Located in an open field next to small farms, the local treatment facility handles wastewater from

HaYogev and Midrach Oz. Its operating company is committed to above par environmental standards, thus ensuring this partparticular area of the Jezreel Valley is well- maintained.

The Challenge

The customer was looking for a localized wastewater treatment solution to replace the existing pond system, which faced difficulties in treating the wastewater due to high levels of nutrients. A new state-level regulation concerning reclaimed water required the

wastewater treatment plant (WWTP) operator to reduce the nutrients in the effluent stream. The solution had to be odorless and quiet, have low power consumption, and use the existing pond and structure.

Design Parameters:

- **Flow:** 125 m³ per day
- **Wastewater characteristics:** dairy farming wastewater
- **Wastewater minimum temperature:** 20°C

Raw Wastewater Influent Characteristics:	Effluent Requirements
BOD_{5,t}: 600 mg/l	BOD₅: 35 mg/l
TSS: 670 mg/l	TSS: 30 mg/l
Ammonia 112 mg/l	Ammonia 50 mg/l



The Solution

The MABR-based wastewater treatment solution was chosen because of the following features:

- Extremely low energy consumption
- Low operating costs
- High effluent quality
- Competitive capital cost
- Neighborhood-friendly design

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The enhanced HaYogev wastewater treatment plant incorporating the MABR product solution has been operational since September 2016, treating 125,000 liters per day and producing high-quality reclaimed water that complies with state regulations concerning water reuse in agriculture.

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Customer's point of view

“For the first time, the community of HaYogev is benefiting from state-of-the-art wastewater treatment, with very low energy operating costs, and producing an ample supply of treated water for their agricultural irrigation needs. When compared to its competitions, the MABR product solution met all our criteria, including lower commissioning costs, superior environmental performance, lower ongoing operating costs, as well as being neighborhood friendly and built from long life components.”

Mr. Tzachi Wermus, CEO of Yuvalei HaEmek municipality