



case study

Location:

Ermelo, Mpumalanga

Customer:

Merino Mall, Moolman Group

Industry:

Shopping Centre

Final water usage:

Toilet flushing, firewater and irrigation

Plant information:

130 KLPD water and wastewater treatment facility

Problem

The Merino Mall faced a significant challenge in meeting its water demand sustainably. Given its rural location, access to municipal water was limited and expensive, making it crucial to find a cost-effective and environmentally friendly water management solution. Additionally, shopping malls generate a high volume of organic waste, leading to increased Biological Oxygen Demand (BOD) in wastewater, which needed effective treatment before reuse or disposal.

**Solution**

- Implementing a wastewater treatment plant optimized for high BOD levels, ensuring effective treatment of mall-generated organic waste.
- Installing a borehole water treatment plant utilizing Active Filtration Media and Granular Activated Carbon filtration to treat borehole water, ensuring safe and high-quality water for the mall's needs.
- Integrating the two systems to maximize water reuse for essential functions such as toilet flushing, firewater supply and irrigation.
- Providing ongoing operation and maintenance services to ensure the continued efficiency of the treatment plants.

Benefits to the customer

- ✓ Significant Water Savings
- ✓ Cost Efficiency
- ✓ Sustainability
- ✓ Operational Reliability

We saved Merino Mall R1.4 million a year!