CASE STUDY

PROJECT	CLASS B EFFLUENT TREATMENT
PRODUCT	Media Filtration and Disinfection
INDUSTRY	Municipal
LOCATION	Victoria

mak water
water | wastewater | sewage

BACKGROUND

A large regional water authority has been providing recycled effluent from their water reclamation plant to an industrial customer for irrigation. The recycled effluent is sourced from the last of a series of lagoons that provide treatment of a trade waste stream. Due to increased loads, hydraulic constraints in the upstream wastewater collection and treatment processes, as well as occasional algal blooms in the lagoons, the effluent quality had become highly variable and compromised. The authority embarked on a staged treatment upgrade to improve effluent quality from Class C to Class B.
As part of this upgrade, MAK Water was selected through a competitive tender process, to design and manufacture a containerised filtration and disinfection plant.

SOLUTION

CUSTOM ENGINEERED SOLUTION

- Custom design, off-site manufacture and testing of a 1,000 m³ per day containerised Multimedia Filtration (MMF) plant with hypochlorite disinfection
- Fast delivery as compared to a plant constructed onsite in a building
- Online monitoring of plant with MAK Water's ClearAccess™ Remote Monitoring
- Non-corrosive FRP filter vessels
- Robust process design allowing for variable feed water quality throughout the year, and possible future pre- and post-treatment steps
- Straightforward site installation and commissioning by MAK Water's Victorian team

Non-corrosive FRP filter vessels

1,000 m³ per day containerised Multimedia Filtration (MMF) plant with hypochlorite disinfection

RESULTS AND BENEFITS

- **Plant Reliability.** Custom design and quality equipment will provide reliable operation with minimal maintenance
- **Turnkey solution.** Custom "fit for purpose" design in a durable prefabricated containerised system.
- **Local.** The plant was built in Australia using materials sourced from local suppliers. Providing superior build quality and spare part availability