CASE STUDY

PROJECT FINAL POLISHING WWTP
PRODUCT Multimedia Filtration (MMF)
INDUSTRY Mining
LOCATION Goldfields-Esperance Region, Western Australia

BACKGROUND

An Australian gold miner was interested in automating their final polishing system at the back end of a 200m³/day Moving Bed Bio Reactor (MBBR) wastewater treatment plant.

MAK Water was selected to investigate the feasibility of upgrading the old bag filter system to a more modern, effective and reliable duty/standby Multimedia Filtration (MMF) system in a 2x 100% configuration, with each vessel capable of taking full daily flow requirements to minimise down time during backwash.

The MAK Water team worked closely with the client to re-design a fit for purpose, long term solution that complies with the Australian environmental discharge guidelines.

SOLUTION

The MAK Water team travelled to the customer's site removed the existing bag filter system, updated the PLC logic to allow for additional controls. We then installed the MMF system and re-commissioned the heavily modified plant.

New MMF system during installation in the existing sewage treatment system

MAK WATER KEY SOLUTIONS

- Custom designed wastewater polishing system to replace cumbersome bag filter system, improving potential health impact by reducing operator interaction
- Duty/standby multimedia filtration
- PLC logic improvements
- Tight install arrangement
- Sized to be installed into existing equipment container
- Onsite plant commissioning and operator training
- Ongoing service and maintenance contract

RESULTS AND BENEFITS

- **Compliance** Achieves better than required treated effluent within customer licence parameters
- **Convenience.** Existing plant modified in-situ saved time on downtime
- **Technical Support**. Expert advice and consultation with all parties throughout the process and ongoing plant service and maintenance by MAK Water
- **Fast Delivery.** The manufacturing process was fast tracked to achieve the required project timeline