CASE STUDY

PROJECT	WASTE WATER RECYCLING FOR COAL PROCESSING
PRODUCT	Brackish Water Reverse Osmosis (BWRO)
INDUSTRY	Mining
LOCATION	Emerald, Queensland

BACKGROUND

With poor rainfall over a number of wet seasons in recent years affecting local water supplies, a Queensland coal mine decided to assess how they could make better use of their mine effected water resources on site. The solution was to recycle unused wastewater bodies on site to maintain security of their water supply.

The available water was high in Total Dissolved Solids (TDS) and organics that needed to be removed prior to reuse. MAK Water was engaged to deliver a fit for purpose water treatment plant incorporating media filtration, activated carbon and reverse osmosis to produce water that was suitable to be used as process water.

SOLUTION

- In-house design and manufacture of a 1,000 m^3/day Brackish Water Reverse Osmosis (BWRO) plant
- Containerised system provided for plug and play installation
- ClearAccess™ Remote Monitoring and Control
- Fast four week lead time utilising stock materials
- Onsite commissioning and training of local operators

1,000 m^3/day Brackish Water Reverse Osmosis Plant

RESULTS AND BENEFITS

- **Quick response**. The reverse osmosis plant was delivered within four weeks.
- **Plant Reliability.** The high quality equipment and robust design has provided 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

Containerised system provided for plug and play installation