

CASE STUDY



PROJECT POTABLE WATER FOR SALT MINE PORT
LOADING FACILITY

PRODUCT Sea Water Reverse Osmosis

INDUSTRY Mining

LOCATION Gascoyne, Western Australia

BACKGROUND

When Rio Tinto required potable water at their Lake MacLeod Salt Mine port facility in the Gascoyne region of Western Australia, they contacted MAK Water to discuss water treatment options. They required a small potable water supply from the available sea water at the port for employee use when loading.

The local operators required a simple, fully automated, robust design, using quality equipment to provide a reliable solution for such a remote location, all within the available budget.

SOLUTION

- Custom design and manufacture of a Sea Water Reverse Osmosis (SWRO) plant
- Containerised (1 x 10') with air conditioning
- Slightly larger capacity plant to provide a more robust design, allow for future expansion, less running time with reduced maintenance, improved performance and better overall reliability
- Flow paced chlorine dosing for downstream sterilisation to complement the existing storage tank and Ultraviolet steriliser
- MAK Water standard equipment
- Fast delivery time
- Onsite commissioning and operator training



Sea Water Reverse Osmosis plant

RESULTS AND BENEFITS

- **Plant Reliability.** High quality equipment and robust design provides better performance and reliability.
- **Turnkey Solution.** Custom “fit for purpose” design in a durable prefabricated containerised system.
- **Cost Effective.** The reverse osmosis plant was delivered within the available project budget.
- **Compliance.** Maintains compliance with Australian Drinking Water Guidelines (ADWG) for potable water.



The Sea Water Reverse Osmosis plant undergoes factory acceptance testing