CASE STUDY

PROJECT	POTABLE WATER AND SEWAGE TREATMENT FOR LNG PROJECT FLY CAMP
PRODUCT	Sea Water Reverse Osmosis Plant, Membrane Bioreactor
INDUSTRY	Oil and Gas
LOCATION	Onslow, Western Australia

mak water
water | wastewater | sewage

BACKGROUND

The first stage of the Wheatstone LNG Project commenced with a temporary fly camp for construction workers. MAK Water was engaged to supply modular Potable Water and Wastewater treatment plants with additional capacity able to handle the initial 500 man fly camp and the start of the main construction camp.

MAK Water took responsibility for the turnkey supply and installation of a Sea Water Reverse Osmosis (SWRO) and membrane bioreactor (MBR) to treat the sewage to a standard suitable for reuse in industrial applications.

SOLUTION

A containerised Sea Water Reverse Osmosis Plant and Membrane Bioreactor Waste Water Treatment Plant were designed, built and installed on site.

POTABLE WATER TREATMENT PLANT

- Sea Water Reverse Osmosis Plant
- Sterilisation and online monitoring systems to achieve potable water as per Australian Drinking Water Guidelines

WASTE WATER TREATMENT PLANT

- Modular, containerised Waste Water treatment Plant treating sewage through a Membrane Bioreactor.
- Supplied as a turnkey package including; sewage pump stations; below ground retention tanks; inlet screen; influent/effluent tanks; a spray field and treated effluent pump sets.
- The MBR utilised encapsulated cross-flow ultrafiltration membranes to achieve "Risk Category High" treated effluent (Class A+) suitable for reuse in dust suppression, concrete manufacture and other applications.

Containerised Sea Water Reverse Osmosis Plant with Chlorine Dosing and recirculation and monitoring systems.

Waste Water Treatment Plants on site in Onslow

RESULTS AND BENEFITS

- **Turnkey solutions.** Turnkey solutions including design, build, installation and commissioning were provided
- **Compliance.** The water treatment solutions complied with high specification requirements for effluent reuse.
- **Remote monitoring and control.** Both plants incorporated remote monitoring and control capabilities to enable MAK Water (or any other technicians) to provide technical support remotely.