

CASE STUDY



PROJECT POTABLE AND DEMINERALISED WATER FOR GAS PLANT

PRODUCT Reverse Osmosis – Demineralised and Potable Water

INDUSTRY Oil and Gas

LOCATION Longford, Victoria

BACKGROUND

ExxonMobil's site service upgrade to enable expansion at its Longford site required additional drinking water and demineralised water for boilers and chemical processes. The Engineering, Procurement, Construction (EPC) contractor, CB&I, pre-selected MAK Water as a preferred supplier due to its experience supplying similar projects previously.

MAK Water became an integrated part of CB&I's team in designing the project to meet ExxonMobil's rigorous engineering standards and to ensure on-time delivery for this key part of the site infrastructure.

SOLUTION

Containerised demineralised (chlorides >2 mg/l and 0 mg/l hydrogen sulphide) plant and a bore water treatment plant providing potable water compliant to Australian Drinking Water Guidelines (ADWG).

CONTAINERISED PLANTS

- By providing containerised plants MAK Water eliminated the need for expensive site labour
- Plug and play operation when the container arrived on site enabled fast and simple commissioning
- Design and construction was done in the MAK Water workshop which reduces construction risk

OIL AND GAS ENGINEERING STANDARDS

- ExxonMobil engineering standards were utilised
- Hazardous area electrical and instrumentation supply
- Manufacturers Data Report (MDR) and other vendor data requirements were included in the comprehensive operations manual

LOCAL AND REMOTE SUPPORT

- Service and support were provided by the local MAK Water service office
- Remote access for engineering and technical back-up

RESULTS AND BENEFITS

- **Design and Build.** CB&I required a water treatment supplier to design and build water treatment plants to meet ExxonMobil's requirements.
- **Oil and Gas standards employed.** The plant conformed to Exxon Mobil's rigorous design and documentation standards.



Containerised demineralised plant



Potable water treatment plant