

CASE STUDY

PROJECT	BUILD OWN OPERATE FOR LITHIUM MINE
PRODUCT	Brackish Water Reverse Osmosis (BWRO)
INDUSTRY	Mining
LOCATION	Western Australia



BACKGROUND

The Pilgangoora Lithium Project, located in Western Australia's remote Pilbara region, commenced production in 2018 and has a production capacity of 220,000 tpa of quality spodumene concentrate.

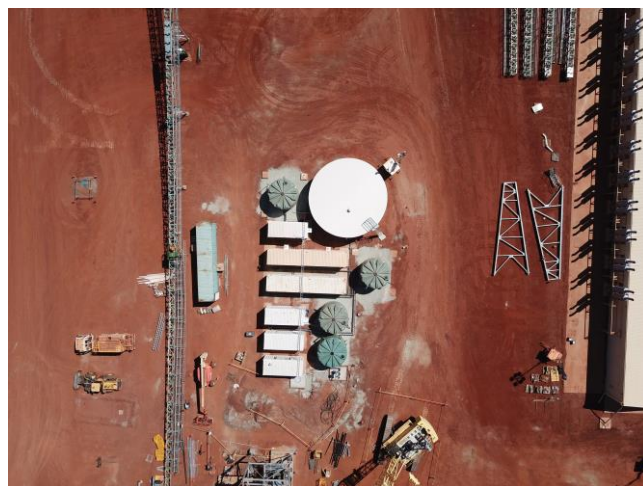
In 2016, MAK Water was approached by the client's EPC contractor to assist with pricing of the water treatment plant required for the lithium processing plant. Over the following 12 months, MAK Water worked closely with the proponent and the EPC contractor, developing several technical and commercial delivery models for consideration. In August 2017, MAK Water was awarded a 5-year build-own-operate (BOO) contract to supply the project's water requirements.

SOLUTION

Turn-key installation of 1,850 m³/day water treatment plant, complete with all tanks and pumps sets, to supply the project's process and potable water requirements, under a 5-year Build-Own-Operate (BOO) agreement.

SUPPLY & INSTALLATION OF EQUIPMENT

- 2 x 925 m³/day containerised brackish water reverse osmosis (BWRO) plants supplying high specification process water
- 50 m³/day potable water system
- Potable, process and brine water pump sets
- Raw, potable, process and brine water tanks
- Site installation and commissioning



Remote monitoring and technical support from MAK Water's Perth Operations Centre

5 YEARS OPERATION & MAINTENANCE

- Fly in-fly out full-time operators
- Remote monitoring and technical support from MAK Water's Perth Operations Centre
- Supply of all chemicals, consumables and parts

RESULTS AND BENEFITS

- **Lowest CAPEX.** Greatly reduced capital expenditure freed up funds for development of the mine
- **Fixed OPEX.** All in \$/kL fixed price agreement all gives peace of mind with respect to operating costs.
- **Lowest risk.** MAK Water took full responsibility for water supply, allowing the client to focus on their core business.



Site installation and commissioning