CASE STUDY

PROJECT	WATER TREATMENT FOR MANGANESE MINE
PRODUCT	Multimedia Filtration, UV and Hypochlorite Dosing
INDUSTRY	Mining
LOCATION	Northern Territory

BACKGROUND

One of the highest grade Manganese mines in the world wanted to upgrade their aging water treatment infrastructure. In order to solve this problem, a leading Australian engineering firm was engaged to provide design services for the processing plant and associated facilities, which included a potable water treatment plant.

MAK Water was selected thanks to our innovative containerised design, extensive experience in delivering high quality packaged water treatment plants for remote mining projects, and our ability to customise our solution to meet the project requirements.

SOLUTION

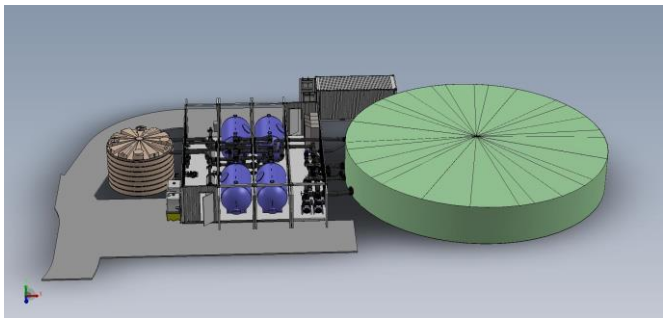
Multimedia Filtration (MMF) plant to produce 4,500m^3 per day of filtered water to supply the mine site and local population potable/drinking water requirements.

CONTAINERISED FOR EXTREME TEMPERATURES

- Air conditioned with wall and ceiling insulation, for protection from harsh operating environment
- Media filters, control system and pipework all fabricated in MAK Water's workshop saving installation time on site

WATER TREATMENT PLANT

- 4 x auto-backwashing horizontal fibre-reinforced plastic (FRP) multimedia filter vessels
- Accepts pressurised feed water (pumps by client)
- UV steriliser with UV intensity monitoring
- Residual trim chlorine gas dosing



Assembly drawing of Multimedia Filtration (MMF) plant to produce 4,500m3 per day

Aerial view of Multimedia Filtration (MMF) plant in MAK Water's Fabrication Facility

RESULTS AND BENEFITS

- **Plant Reliability.** Custom design and quality equipment will provide reliable operation with minimal maintenance
- **Project specifications**. Plants built in accordance with customer engineering specifications
- **Compliance.** Maintains compliance with Australian Drinking Water Guidelines (ADWG) and Water Services Association of Australia (WSAA) health based targets for drinking water.