

CASE STUDY

PROJECT	SEWAGE TREATMENT PLANT UPGRADE
PRODUCT	Multimedia Filtration
INDUSTRY	Oil & Gas
LOCATION	Papua New Guinea



BACKGROUND

An Oil & Gas operation located in a remote region of Papua New Guinea was experiencing operational issues with their sewage treatment plant. Elevated levels of total suspended solids were observed in the treated effluent due to some waste management changes upstream of the plant. A tertiary media filter was the preferred solution and being such an isolated area, a pre-fabricated / pre-tested plant suited the project requirements very well.

MAK Water was engaged to build a containerised filtration plant that would be installed at the end of the sewage treatment process to ensure compliance with the discharge requirements.

SOLUTION

- Custom design and manufacture of a Multimedia Filtration (MMF) plant
- Containerised (1 x 10') with air conditioning and non-slip floor coatings
- Automated filter backwashing
- Non-corrosive FRP filter vessels
- Easily transported and installed onsite
- 100% designed, constructed and tested off-site
- Plug and play site installation and commissioning



Fabricated, tested and packaged for plug and play site installation and commissioning

RESULTS AND BENEFITS

- **Minimal Operator Requirement.** High level of automation and online monitoring allow for minimal operator input.
- **Plant Reliability.** The high quality equipment and robust design has provided reliable operation with minimal maintenance
- **Compliance.** Reduces suspended solids to ensure compliant discharge



Compact containerised (1 x 10') with air conditioning and non-slip floor coatings