CASE STUDY

PROJECT RAINWATER & WASH BAY WASTEWATER FOR PORT CONTAINER TERMINAL

PRODUCT Multimedia Filtration and Belt Filter Press

INDUSTRY Infrastructure

LOCATION Brisbane, Queensland

mak water
water | wastewater | sewage

BACKGROUND

As part of the expansion of the Patrick Terminals, Port of Brisbane operations, a new water efficient wash bay was required.

It was important the solution complied with the Department of Agriculture, Fisheries and Forestry's standards and maximised the reuse of the wash water, eliminating any discharge of polluted water to local water ways.

SOLUTION

MAK Water (trading as Clearmake at that time) was selected to design, manufacture and commission a custom system for this application.

CUSTOM ENGINEERED SOLUTION

- Solution tailored to treat the site waste water, making it suitable for reuse or discharge to the environment.

STORM WATER DIVERSION SYSTEM

- First flush water from the wash bay is collected and directed to the recycling system for treatment.
- Clean storm water is allowed to flow directly to underground tanks for reuse.

RAINWATER HARVESTING SYSTEM

- The system treats water harvested from the hardstand for reuse in the wash bay, toilet flushing or irrigations.

WATER RECYCLING SYSTEM

- Capable of treating the wash down water generated by the wash. The system removes silt, oil, grease and heavy metals prior to filtration and disinfection.
- The belt filter press dewaters the waste sludge generated in the water treatment process, reducing waste disposal costs.

Water efficient wash bay

Custom engineered solution

RESULTS AND BENEFITS

- Site is water self-sufficient.
- Compliant. Discharges comply with Department of Agriculture, Fisheries and Forestry's standards
- Cost Reduction. The Belt Filter Press reduces system operational costs.