CASE STUDY

PROJECT WASH BAY WASTEWATER RECYCLING FOR AIRPORT AIRCRAFT HANGAR

PRODUCT Gravity Clarification and Oil Water Separator

INDUSTRY Infrastructure

LOCATION Brisbane, Queensland

BACKGROUND

The QANTAS terminal at Brisbane Airport required water treatment and recycling solutions for the treatment of water from wash down of aircraft and parts.

The waste water was to be treated and reused for wash down with excess water used for local irrigation.

SOLUTION

The solution was a gravity clarification system with an oil water separator. MAK Water (trading as Clearmake at the time) worked in partnership with QANTAS to design, manufacture and commission the water treatment and recycling equipment.

GRAVITY CLARIFICATION WATER RECYCLING SYSTEM

- Capable of treating up to 3,000L per hour of wash down water.
- The system removes silt, oil, grease and heavy metals from the water. It then filters and disinfects the water to ensure it is safe for reuse for wash down or irrigation.

OIL WATER SEPERATOR

- It was not practical to recycle water from some parts of the operation, so the water was treated using two Clearmake oil water separators designed for use in hazardous areas with intrinsically safe control systems before being discharged to the sewer system.

The gravity clarification system and oil water separator

The gravity clarification system and oil water separator on site at the Qantas Brisbane Airport

RESULTS AND BENEFITS

- **Maximum water efficiency.** This combination of solutions cost effectively maximises water efficiency on the site.
- **Minimal trade waste discharge costs.** The solution minimised trade waste discharge costs.
- **Environmental protection.** The local storm water system and environment is protected from the pollutants generated on site during the wash down process.
- **Short-term payback.** Pay back on this project was only 18 months.