CASE STUDY

PROJECT WASH BAY WASTEWATER RECYCLING FOR CONSTRUCTION EQUIPMENT DEPOT

PRODUCT Dissolved Air Flotation

INDUSTRY Infrastructure and Urban Development

LOCATION Rockhampton, Queensland

mak water
water | wastewater | sewage

BACKGROUND

As part of a facility upgrade, Hastings Deering required a new wash bay water recycling system at its Rockhampton facility.

The wash down water was largely contaminated with dirt and soil, but there were was also a small amount of oil and grease entrained in the wash down water that needed to be removed prior to re-use. Bench testing demonstrated that Dissolved Air Flotation (DAF) was the lowest cost solution.

SOLUTION

MAK Water was selected to design, manufacture, install and commission a wash bay water recycling system, working in partnership with Hastings Deering and their Project Engineers.

DISSOLVED AIR FLOTATION (DAF)

- A recycling system capable of treating 10,000L per hour of wash down water
- Hydroxide precipitation, flocculation and DAF clarification removes silt, heavy metals, seeds, weeds and pests from the water
- Filters and disinfects the water to ensure it meets safe water and occupational health and safety requirements to reuse for vehicle and equipment wash down
- Supply and onsite installation of interconnecting pipework and electrical
- Fast 10-12 week delivery time
- Onsite commissioning and training of local operators, with ongoing service and maintenance agreement

The dissolved air flotation recycling system

Wash bay water recycling system in use at the heavy equipment facility

RESULTS AND BENEFITS

- **Lowest total operating cost.** Eliminated the use of potable water for wash down and the need to discharge contaminated water to the local sewer.
- **Compliance.** Compliance with planning and regulatory requirements.