

CASE STUDY

PROJECT MINING VEHICLE WASH WATER RECYCLING

PRODUCT Vehicle Washbay Water Recycling System

INDUSTRY Mining

LOCATION South-west, Western Australia



BACKGROUND

Washing vehicles is an important activity in running an effective mine. Clean vehicles are less likely to break down and it is also key in minimising the contamination of sensitive areas like workshops.

The large quantity of water required to wash the many large mining vehicles on a site can be a problem though. Smart mining operations seeking efficiency improvements and cost savings by reusing water where possible – light and heavy vehicle wash bays are ideal for recycling water.

In this case, a mine in Western Australia's south-west requested a custom solution to recycle up to 15kL of vehicle wash wastewater per hour. The system would have to remove contaminants like fuel residue, grease and other hydrocarbons as well as detergents and suspended solids to make the water fit for effectively washing multiple vehicles.

SOLUTION

Flat-rack mounted OWS with 15kL/h capacity (CL-20) and containerised MMF plant with 360kL/day capacity.

MAK WATER KEY SOLUTIONS

- Flat-rack mounted 304 stainless steel OWS with floating skimmer pit suction & integrated feed pumps and waste oil reservoir
- Containerised (1 x 20') MMF & cartridge filtration
- Modular solution for easy transport & installation
- Custom chemical dosing;
- Onsite plant commissioning and operator training
- Service & maintenance plan for duration of the hire.
- ClearAccess remote access & technical support
- Supply of treated water tank
- Ongoing service & maintenance agreement with regular site visits from a MAK Water technician



Skid-mounted OWS and containerised delivered to site

RESULTS AND BENEFITS

- **Compliance** Achieves required compliance with client's water requirement as well as helping with the site's water use license requirements.
- **Reliability.** Designed and built in Australia for local conditions. Ongoing service & maintenance plan minimises risk of breakdowns.
- **Sustainability.** Recycling saves several million litres of water annually, preserving the resource, and treatment protects from environmental contamination.
- **Cost Savings.** Several million litres of water saved annually presents significant cost savings



Inside the containerised MMF plant