CASE STUDY

PROJECT OIL REFINERY WASTEWATER REUSE
PRODUCT Oil Water Separator (OWS), Multimedia Filtration (MMF)
INDUSTRY Oil and Gas
LOCATION Balikpapan, Indonesia

mak water
water | wastewater | sewage

BACKGROUND

A new oil refinery washbay required captured stormwater to be treated for onsite reuse. The client sought to reduce potable water consumption, eliminate environmentally harmful discharge and ensure reliable hydrocarbon and solids removal to meet reuse quality. The solution needed to be compact and quick to install within a constrained footprint.

SOLUTION

MAK Water partnered with the site team to replicate a proven design used on a similar refinery project, adapting the layout to the client's available footprint. We delivered a compact, skid-mounted treatment train combining an Oil Water Separator (OWS), multimedia filtration (MMF) and hypochlorite disinfection dosing. The system was factory tested and supplied as a plug-and-play unit to minimise onsite commissioning time and contractor interface.

MAK WATER KEY SOLUTIONS

- Compact skid-mounted OWS integrated with MMF and hypochlorite dosing for disinfection.
- Modular, configurable design to suit unique site footprints and washbay pipework.
- Factory acceptance testing and plug-and-play connections to reduce onsite labour and risk.

Compact, skid-mounted treatment train

Multimedia filtration (MMF) and hypochlorite disinfection dosing

RESULTS AND BENEFITS

- Sustainability. Improved sustainability through industrial water recycling and reliable hydrocarbon removal.
- Reduced potable water use. Treated water compliant for washbay reuse, reducing potable water demand and operational cost.
- Environmental compliance. Eliminated environmental discharge risks and simplified regulatory compliance for effluent quality.
- Fast installation. Reduced site civil/pipework scope due to modular skid design.