

CASE STUDY



PROJECT	OILY WASTEWATER TREATMENT FOR GOLD MINE WASH BAY & WORKSHOPS
PRODUCT	Oil Water Separator
INDUSTRY	Mining
LOCATION	Western Australia

BACKGROUND

When discovered in October 2013, Gruyere was one of the largest undeveloped gold deposits in Australia. In 2017, MAK Water supplied several water and sewerage treatment plants for the project's mine site and accommodation camp. In 2018 an Oil Water Separator was needed to treat oily wastewater from the site's workshop, diesel storage area and the LV wash-down facility; the treated water is then pumped to tailings. MAK Water's Clearmake brand of vertical tube coalescing separator was selected to meet the site environmental license.

In addition to supply of the Oil Water Separator, MAK Water also provided the process and mechanical design of the upstream concrete settlement tank, to enable construction onsite by others.

SOLUTION

25 m³/hr Oil Water Separator with floating suction skimmer, 2,300L self-bunded waste oil storage tank, treated water transfer tank and pump, with prefabricated interconnecting piping and cabling.

MODULAR, PRE-ASSEMBLED AND PRE-TESTED

- Separator skid with feed pump, control panel and overhead lighting tower
- Skid mounted auxiliary equipment (waste oil intermediate tank, waste oil transfer pump and treated water transfer pump) with overhead lighting tower
- Free standing self bunded waste oil tank with leak detection and 9,000L treated water tank

PROJECT SPECIFICATIONS

- Project preferred electrical equipment
- Project compliant engineering specifications
- Project compliant vendor data package

RESULTS AND BENEFITS

- One-stop-shop supplier for all the project's water treatment requirements reduces long term spares and maintenance costs
- Floating oil in water sensor detects catastrophic oil spills, preventing contaminated water discharge
- Design of settlement tank ensured adequate settling of solids prior to treatment



Separator skid with feed pump, control panel and overhead lighting tower



2,300L self-bunded waste oil storage tank