

# CASE STUDY



**PROJECT** SINGLE-STEP WASTEWATER TREATMENT FOR PAINT MANUFACTURER

**PRODUCT** Single-Step Wastewater Treatment System (BCU)

**INDUSTRY** Manufacturing

**LOCATION** Kilburn, South Australia

## BACKGROUND

One of Australia's largest paint manufacturers produces over 50 million litres of paint annually at its major production facility. The regular washing down of equipment, tanks and vats generates approximately 50,000 litres of contaminated industrial wastewater each day.

Increasingly stringent sewer discharge limits, rising trade waste charges and escalating disposal costs (including pump-out requirements) created a need for an efficient onsite wastewater treatment solution to ensure compliance and improve sustainability.

## SOLUTION

Our team worked closely with the client to design and deliver a fully automated wastewater treatment solution tailored to the variable characteristics of paint manufacturing effluent. Following a detailed assessment of site conditions and treatment options, a Single-Step Wastewater Treatment System (BCU) was installed. This was integrated with existing holding tanks to maximise equalisation of fluctuating wastewater loads.

The treatment process effectively removes suspended solids, oils and greases, heavy metals and surfactants in a single-step process, delivering compliant effluent suitable for discharge or reuse.

## MAK WATER KEY SOLUTIONS

- Fully automated system with PLC control
- Integrated equalisation using existing holding tanks to manage variable influent loads
- Single-step treatment process for removal of suspended solids, oils, greases, heavy metals and surfactants
- High-capacity continuous treatment of up to 96 kl/day
- Durable 304 stainless steel construction
- Sludge dewatering with encapsulated waste suitable for low-cost landfill disposal



*Single-Step Wastewater Treatment System (BCU) on site*

## RESULTS AND BENEFITS

- **Compliance.** Treated wastewater consistently meets stringent sewer discharge limits for industrial trade waste
- **Cost savings.** Significant reduction in pump-out and disposal costs, delivering ongoing operational savings
- **Sustainability.** Enables water reuse through effective contaminant removal
- **Operational efficiency.** Fully automated system supports continuous treatment with minimal operator intervention
- **Reliability.** Proven long-term performance with continuous operation and no service interruptions
- **Waste minimisation.** Dry sludge encapsulation reduces disposal volume and simplifies waste management



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