

# CASE STUDY

**PROJECT** TRADE WASTEWATER TREATMENT  
FOR LABORATORY

**PRODUCT** pH Adjustment - Batch

**INDUSTRY** Infrastructure

**LOCATION** Brisbane Airport, Queensland



## BACKGROUND

Laboratory services at Brisbane Airport needed to treat the wastewater from their on-site laboratories to ensure it could be safely and compliantly discharged to sewer.

MAK Water proposed a Containerised pH Adjustment Batch System capable of treating up to 1,000l/h of acid wastewater.

## SOLUTION

MAK Water supplied a turnkey customised system specifically designed to meet the laboratory's requirements. It collects waste streams from all areas of the laboratory in a holding tank which is batched in a separate tank and recirculated to neutralise the pH with acid addition. Once the batch meets the criteria for safe discharge it is pumped out to trade waste.

The solution included:

- A containerised pH adjustment batch system capable of storing and neutralising laboratory waste.
- Capability of treating up to 1,000 litres per hour of acid wastewater from a cement testing laboratory.
- pH monitoring and temperature, acid dosing and a fully automated control system.
- Data logging of pH for environmental discharge licence compliance.

## RESULTS AND BENEFITS

- **Compliance.** The waste water treatment system complies with local council sewer discharge requirements.
- **Lowest total operating cost.** By treating on site this eliminated the requirement to truck waste off site for disposal, and reduced operational costs.
- **Turnkey solution.** MAK Water designed, manufactured, delivered & installed a custom treatment system to meet the clients' discharge requirements.



*pH Adjustment Batch System capable of treating up to 1,000l/h of acid wastewater*



*Containerised pH Adjustment Plant*