

CASE STUDY



PROJECT WASTEWATER
FOR MINING LABORATORY

PRODUCT pH Adjustment - Batch

INDUSTRY Mining

LOCATION Orange, New South Wales

BACKGROUND

Newcrest Services needed to treat the wastewater from their on-site laboratories to ensure it could be safely and compliantly discharged to sewer.

SOLUTION

MAK Water worked in partnership with Newcrest to develop a customised system specifically designed to meet the needs of the site. It collects waste streams from all areas of the lab in a batch tank which is mixed and recirculated to adjust the pH either up or down depending on the requirement. Once the batch meets the criteria for safe discharge it is pumped out to trade waste.

The solution included:

ACID NEUTRALISATION SYSTEM

- A pH adjustment batch system capable of storing and mixing laboratory waste.
- The system is capable of treating up to 150 L/h of acid wastewater from the geological laboratory.
- The system includes filtration, temperature and pH monitoring, alkali dosing and a fully automated control system.



pH Adjustment Plant

RESULTS AND BENEFITS

- **Compliance.** Environmental and trade waste compliance for the site.
- **Lowest total operating cost.** By treating on site rather than having to truck waste off site for disposal, this solution has the lowest total operating cost.



pH Adjustment Plant