

Hunter H2O can help with...

- Optimising treatment performance and control to reduce cost and improve performance,
- Troubleshooting ongoing operational issues with your water or wastewater treatment plants,
- Assessment of treatment capacity and plant condition to support your business decisions,
- Jar testing or pilot plant testing to identify key knowledge gaps, reduce design risks and costs.

Our Team

Our people are the leading specialists in the water industry with the experience to assist with every water and wastewater treatment issue. Our team has the all the specialists you need to optimise the performance of your plant. Our team includes leading process engineers, scientists and control engineers with the experience to identify process issues and implement control solutions. Our depth of water industry experience allows us to identify the right solution quickly and efficiently.

Our Approach

We believe that the best outcomes are realised by working in partnership with our clients. By working collaboratively, our team share knowledge with your team and work to support and develop your ongoing business operations. Our specialist team investigate process optimisation opportunities through a range of measures including; site inspections, jar testing, pilot plant testing, site trials and review of SCADA data. We deliver practical, reliable and innovative solutions for you to secure long lasting cooperative relationships.

Key Projects

Pilot plant testing Ozone/BAC, Grahamstown Water Treatment Plant

Grahamstown WTP is Hunter Water's largest water treatment plant, with a peak supply capacity of 260 ML/d. The WTP currently uses a conventional treatment process, however Hunter Water are considering the use of a conventional process train incorporating intermediate ozonation and biological activated carbon (BAC) filtration as part of a future upgrade.

Hunter H2O established and operated an onsite pilot plant to further investigate the ozone/BAC process with the Grahamstown WTP raw water sources. The pilot plant provided valuable information in terms of validating overall water quality benefits, removal of toxins, integration of new assets with existing assets and refining design criteria and lifecycle costs of the process. This information was used to refine the concept design which will result in capital costs savings.

Energy and Process Optimisation, Belmont Wastewater Treatment Works

In wastewater treatment, process efficiency and energy efficiency are closely related. Aeration control systems that are not responding to load variations or reactors that are operating at higher dissolved oxygen set-points, results in both wasted energy and process issues such as high effluent Total Suspended Solids concentrations from clarifiers.

Hunter H2O was engaged to optimise the process and energy performance of Hunter Water's Belmont WWTW. Our process and control system experts identified that the aeration control system had not been properly commissioned for the load that the plant was treating. Our recommendations for aeration control system changes and adjustment of RAS control resulted in annual energy cost savings of approximately \$50k-\$70k. Process performance also improved in terms of settling performance and nitrogen removal. Our team of process, control system and electrical engineers work closely to deliver process and energy optimisation.

Plant Optimisation and Compliance

Talk to us

Paul Thompson
General Manager,
Process and Operations
Ph: 02 4941 5000

www.hunterh2o.com.au

OFFICE LOCATIONS

NEWCASTLE
SYDNEY
BRISBANE
ADELAIDE
SUVA, FIJI

