

CASE STUDY



**water
treatment
services**

project: Long-term Drinking Water Treatment Plant Support
products: Inorganic, organic coagulants, filter aid Powdered Activated Carbon, descaler
industry: Municipal
location: Far North Queensland

background

WTS has supported a 230+ML/day municipal drinking water treatment plant in far north Queensland, providing broad technical & operational support and water treatment chemicals for over 30 years.

The Northern QLD environment provides particular challenges during the monsoon season when water deluges can cause rapid and significant changes in water quality. WTS provides additional technical assistance during rain events.

WTS also:

- provides routine onsite and laboratory testing services
- provides support in monitoring and managing seasonal algal blooms
- scheduled preventative maintenance

WTS has been instrumental in operational improvements and upgrades over our 30-year involvement.

solution

Over a productive 30+ year relationship with our valued client, WTS has become an embedded partner in the operation of the plant as well providing support through several asset improvement projects. WTS provides many ongoing and project-based services as well as chemical solutions to the plant's operator:

- Provide bespoke inorganic and organic coagulants WTS 8-23 & WTS 8-CC40L tailored for the clarification of drinking water
- Filter aid WTS 8-A0510P optimises efficiency in the operation of the sludge centrifuge
- Onsite trials initially determined the optimum solution to apply
- Commissioning of the batching system and technical assistance in centrifuge optimisation
- WTS has provided and continues to manage the application of activated carbon solutions targeting odour and algal toxin removal
- Conducted pH correction pilot trials onsite and subsequently recommended and applied new solutions.
- Assist in facilitating process and product changes
- Daily jar testing to determine optimal coagulant and flocculant dosages

Conduct scheduled descaling operations of their sodium hypochlorite dosing lines with WTS 9-334



results and benefits

- **Compliance.** Achieves required water quality (ADWG) compliance.
- **Resilience.** WTS' management programmes ensure reliable supply of critical consumables to ensure the availability and quality of public drinking water supply
- **Technical Support.** Expert advice and consultation with all parties throughout the process and ongoing plant service and support by WTS.
- **Productivity.** Increased productivity associated with up-to-date treatment recommendations and scale management practices. Provide a local backup supply of commodity products when roads are closed due to flooding and natural disaster events.
- **Efficiency.** WTS' four-phase solution design process ensures that the correct products are applied only at the optimal doses for the required outcome, eliminating wasted product.
- **Asset Condition.** Site condition is excellent due to cleaning programs and media filter cost minimal due to correct use of coagulants flocculants and filter aids