

Mirani Water Recycling Facility Upgrade

Completed 2016



Mackay Regional Council required provision of a staged upgrade to the Mirani Water Recycling Facility (WRF) to address capacity, odour and gas issues being experienced at the old inlet works. A new 10,000 EP Preliminary Treatment Area (PTA) and Air Treatment Facility (ATF) was provided.

GANDEN were the process designers, civil designers and commissioning lead. At the request of Council, GANDEN also took on the role of Project Manager for the entire project.

Highlights and Innovations

- Optimisation of the tender design from inclined drum screens to spiral sieve screens to improve O&M performance.
- Successfully commissioned without major incident.



Principal

Mackay Regional Council

GANDEN's Role

- Project management
- Design management
- Process design
- Civil design
- Commissioning management
- Operations and maintenance manuals
- Training

Work Undertaken

- New 10,000 EP Preliminary Treatment Area comprising:-
 - 4x inlet pipes with flowmeters,
 - Inlet manifold,
 - 3x spiral sieve screens,
 - Vortex grit removal,
 - Bypass screen,
 - Merrel Bins and
 - Auto-sampler
- Bioscrubber air treatment facility
- Fire water system
- Service water system
- Four liquor pump station
- General purpose and septage pump stations
- SCADA system
- Chemical unloading bund extension
- Bypass pipeline and flowmeter
- Earthworks and road pavement