

Project Summary

**CLIENT:**

Unitywater

LOCATION:

Brendale, QLD

SERVICE:

Wastewater Sludge Handling

CAPACITY:

80T Hopper & Conveyor System

CONTACT:

Peter Ferrando

ISSUES:

An existing operational site that could not be interrupted (for long) and with limited space given the proximity of the plant boundary. The site relied on daily hire of a semi and daily removal of less than full truckloads of sludge.

SOLUTIONS:

A belt conveyor system feeding an 80 tonne capacity hopper

BENEFITS:

Truck load out is reduced from daily partial loads to 2-3 full truck loads per week. Operators have the flexibility to better govern their processing of RAS and sludge levels within the process.

PRODUCT:

Custom designed Aquatec Maxcon conveyor system, sludge hopper and clamshell loading gates.

COMPLETION DATE:

September 2012

Brendale STP Sludge Handling System

Aquatec Maxcon provided the civil, mechanical and electrical materials and manpower services for the installation of a new sludge handling system for the Brendale sludge process. Key features of this plant are:

- 80 tonne twin bay sludge hopper.
- Hopper weighing system capable of local digital display for operator unloading and feedback to plant SCADA.
- Elevated operator/driver control station allowing the operator to observe loading and accurately control loading of the sludge transport vehicle.
- Pneumatically controlled sludge loading system capable of easy use by truck drivers.
- Two separate single cylinder timed/mated clamshell gates for accurate and fine control of sludge discharge and loading rate.
- One horizontal belt conveyor retrofitted into the existing belt filter press room to collect sludge directly off the belt filter press discharge point.
- Two inclined belt conveyors to raise the sludge up to the top of the hopper in a switchback arrangement facilitated by the limited available space.
- External conveyors fitted with weather hoods and stainless underpans which assist with odour control and contain spillage.
- Hopper spreader system that allows full utilisation of the twin system even where the feed is directly into only the first hopper bay.
- Additional sludge level measurement radar system with improved longevity and functional ability to control the activation of the spreader drive only when necessary.

