

Client:

Unitywater

Location:

Brendale, QLD

Value:

\$1.3 million

Problems:

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

Completion Date:

September 2012

Aquatec Maxcon provided the civil, mechanical and electrical materials as well as the 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; and
- Additional sludge level measurement radar system with improved longevity and functional ability to control the

Contact:

activation of the spreader drive only
when necessary.

Ray Janowicz - Aquatec Maxcon

Other Related Projects:

- Bundamba Sludge Handling Plant;
- Goodna Sludge Handling Plant; and
- Oxley Creek Sludge Handling Plant.