

**CLIENT:**

Clarence Valley Council

LOCATION:

Rokeby, TAS

SOLUTIONS:

Water quality improvement and increased capacity to cater for extra sewage flows

BENEFITS:

Reduction in discharge to the Derwent River by recycling treated effluent

COMPLETION DATE:

January 1999

CONTACT:

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Rokeby Wastewater Treatment Plant

The Rokeby WWTP was commissioned in January 1999 for the Clarence Valley Council. It is located in the mouth of the Derwent River at Hobart. The 16500EP modified IDEA (Intermittent Decant and Extended Aeration) process included biological phosphorus removal and a chemical dosing system to supplement the phosphorus removal. The IDEAL process maximised the potential for effluent re-use, thereby enabling future reduction in discharge to the Derwent River by recycling treated effluent.

Aquatec Maxcon provided all process equipment for the bioreactor including a fine bubble aeration system, rotating effluent decanting troughs, sludge processing with lime stabilisation, UV disinfection and a PLC based control system.

There are two aerobic/anoxic tanks each 20m x 46m x 3.5m deep with an additional 1.2m height for PWWF. Three 75kW positive displacement blowers provide air for the fine bubble membrane diffusers. The tanks operate in alternate mode to provide continuous sludge discharge to the dewatering system and near constant air demand for reduced peak power costs.

The plant is fully automated via the PLC control system and SCADA enabling the plant to be attended part time, allowing operators to also run a number of other nearby plants.

