

MEETING STRINGENT DISCHARGE LIMITS IN THE GREAT BARRIER REEF FOR PT HINCHINBROOK RESORT

CASE STUDY



THE CLIENT

The Port Hinchinbrook Resort is located in tropical north Queensland between the Cardwell range and Hinchinbrook Channel.

OVERVIEW

Due to the pristine environment and tight discharge water quality required by the Great Barrier Reef Marine Park, an advanced nutrient removal Roadtrain® Packaged Plant was installed.

The Roadtrain® treatment system included:

- Equalisation Tanks
- Fine Screening for solids removal
- Anoxic Reactor
- Aerobic Reactor
- Secondary Clarification
- Tertiary Filtration
- Disinfection



- Biosolids Digestion
- Sludge Drying Beds
- Wet weather storage
- Controls and SCADA

The tertiary systems allows for partial reuse of the treated water for irrigation purposes. Biomass produced from the process is aerobically digested to stabilise the sludge and remove pathogens. Final drying occurs in sludge drying beds.

To facilitate site installation the process tanks were delivered as pre-fabricated painted steel tanks, which reduces site installation time which is key in a project such as this due to its remote location.

Hydroflux Epco packaged plants are operating across 4 continents with over 150 installations. The systems are ideal for remote locations, where a robust process and mechanical design along with minimal operator attendance is required.

Item	Value
Capacity	1000 EP
Process	Extended aeration
TN Limit	5 mg/L
TP Limit	1 mg/L
Faecal Coliforms	10 cfu/100mL
Year	2006