

# Mount St John Wastewater Treatment Plant



## Fast Facts

- Location:** Mount St John Road, Mount St John
- Quantity of water treated:** 16,000kL per day
- Total treatment capacity:** 25,000kL per day
- Population covered:** Approximately 106,000 people
- Service area:** Kirwan, Upper Ross, Northern Beaches, parts of Garbutt and Currajong
- Operating hours:** 24 hours a day, seven days a week, 365 days a year
- Number of staff:** Six

## About the facility

The Mount St John Wastewater Treatment Plant was first commissioned in 1972. It received a major upgrade in 2011 to increase its capacity. It is Townsville's oldest wastewater treatment plant.

## What is the process for treating wastewater?

The wastewater is treated by a number of processes which remove solids, organic matter and nutrients from the sewage so it can be safe to reuse.

## Where is the wastewater discharged?

The treated water is discharged in three locations:

1. Snaggy Creek, which flows into the Bohle River
2. Rowes Bay Golf Course irrigation
3. On site where it is re-used as service water

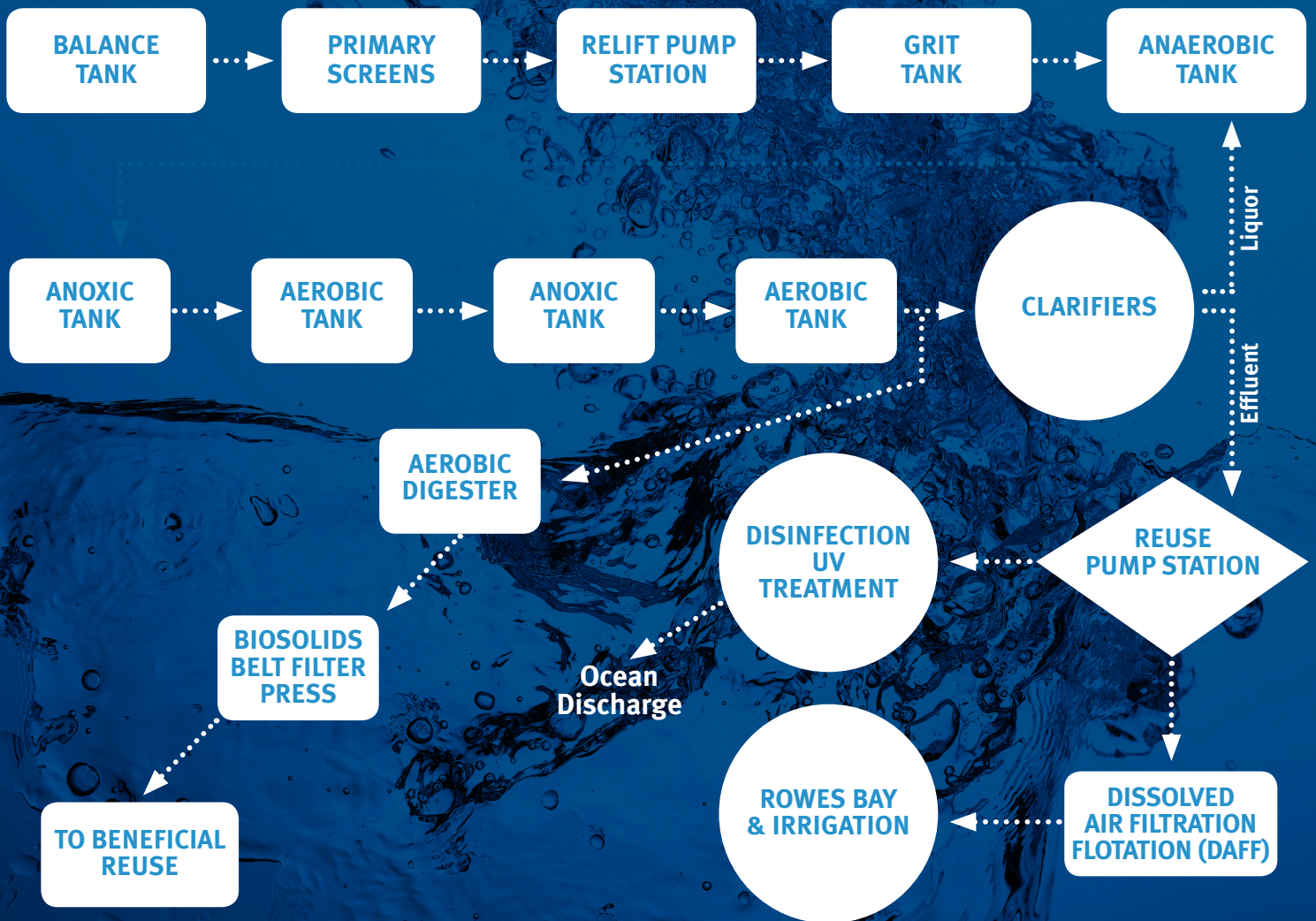
## How are other waste products used?

Bio-solids produced by the facility are rich in nutrients so they are used as fertiliser.

## How is odour managed at the facility?

The flow balancing tank and inlet area is covered and the gases are extracted and passed through an odour control system. The air from the inlet goes through a filter where odours are removed by bacteria. The liquid within the filter is circulated to keep bacteria in a moist environment.

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## Legend:

- BALANCE TANK** – stores wastewater
- PRIMARY SCREENS** – remove larger material
- RELIFT PUMP STATION** – pumps wastewater into the plant
- GRIT TANK** – removes sand and smaller material
- ANAEROBIC TANK** – releases phosphorus
- ANOXIC TANK** – breaks down nitrates to nitrogen gas
- AEROBIC TANK** – converts ammonia to nitrate and breaks down organic matter
- CLARIFIER** – separates sludge from effluent
- AEROBIC DIGESTER** – breaks down waste sludge
- BIO-SOLIDS BELT FILTER PRESS** – removes liquid from sludge for reuse
- REUSE PUMP STATION** – pumps effluent to Dissolved Air Filtration Flotation (DAFF)
- DISINFECTION UV TREATMENT** – disinfects effluent via UV light
- DISSOLVED AIR FILTRATION FLOTATION (DAFF)** – removes any remaining fine particles

## OBSERVATIONS




For more information:  
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