

Cleveland Bay

PURIFICATION PLANT



Fast Facts

LOCATION » Racecourse Road, Cluden

QUANTITY OF WATER TREATED » 25 mega litres per day

TOTAL TREATMENT CAPACITY » 29 mega litres per day

POPULATION COVERED » Approximately 126,000 people

SERVICE AREA » Pallarenda, Belgian Gardens, West End, City, Hyde Park, Railway Estate, Mysterton, South Townsville, Currajong, Gulliver, Pimlico, Vincent, Aitkenvale, Mundingburra, Douglas, Aitkenvale, Idalia, Stuart, and Oonoonba

OPERATING HOURS » 24 hours a day, seven days a week, 365 days a year

NUMBER OF STAFF » Six

About the facility

The Cleveland Bay Purification Plant was opened in 1988. At that time the facility treated raw sewage through an oxidation ditch, and discharged effluent to Cleveland Bay.

The plant received a major upgrade in 2006 which changed its

treatment method to a membrane bioreactor. At the time, it was considered the largest membrane bioreactor treatment plant in the southern hemisphere.

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 or safely discharged into the environment.

Where is the wastewater discharged?

The treated wastewater is discharged in three locations:

- » The ocean outfall at Cleveland Bay
- » Colinta for livestock watering
- » On site where it is used as service and irrigation water

How are other waste products used?

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

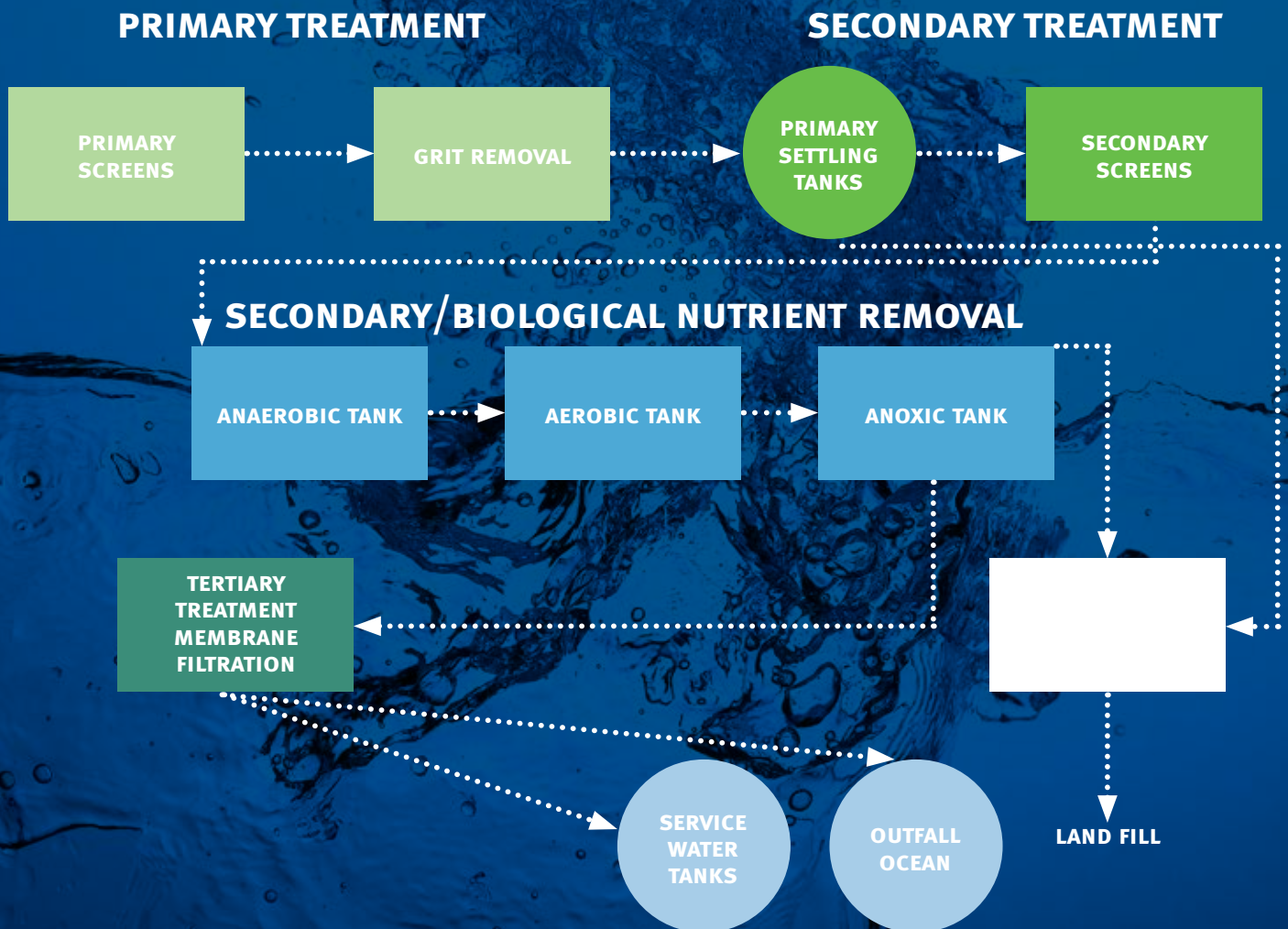
How is odour managed at the facility?

Hazardous and corrosive gases are put through three biological filters that contain a unique blend of bacteria which remove contaminants. The contaminants are later oxidised into harmless, environmentally-friendly substances.




Cleveland Bay

PURIFICATION PLANT



Legend

-  **PRIMARY TREATMENT**
-  **SECONDARY TREATMENT**
-  **SLUDGE HANDLING**
-  **BIOLOGICAL NUTRIENT REMOVAL**
-  **TERTIARY TREATMENT MEMBRANE FILTRATION**

This image shows a single sheet of white paper with horizontal blue lines, resembling notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

For more information:
enquiries@townsville.qld.gov.au
www.townsville.qld.gov.au

