

Sustainable water management

Case study Southern Cross West Tower, Melbourne

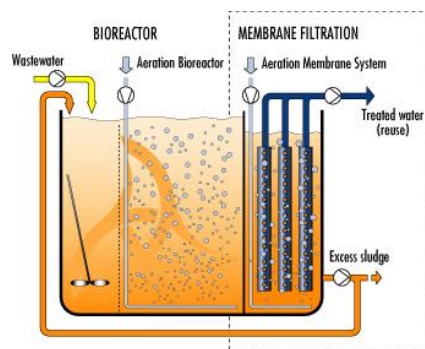
There is an increasing demand for clean water throughout the world. Especially in those areas where water is a scarce, the price of water has been increasing continually. This in turn has resulted in an increasing demand for water reuse. For applications such as these, Triqua offers advanced wastewater treatment systems (Membrane Bioreactors). The high quality of the water that has been treated makes reuse an attractive alternative.

SubTriq® for the treatment of household and well degradable wastewater

The SubTriq® is based on a filtration procedure with membranes that are submerged in the biomass, either inside the bioreactor itself or in a separate tank. The membranes are submerged directly in the bioreactor or in a separate tank and filtration takes place by applying vacuum to the inside of the membrane. Membrane fouling is prevented by the flow of coarse air bubbles along the membrane surface.

Prerequisites for the application of submerged Membrane Bioreactors:

- Wastewater should not be highly concentrated (i.e. household wastewater)
- Wastewater that is well biodegradable
- Higher flows (> 20m³/h)



The SubTriq® process

The SubTriq®-advantages

- Low energy requirement
- High reliability and simple operation
- Compact design
- High treatment efficiency
- Treated water is free of suspended solids and bacteria
- The custom made SubTriq® installations always meet your technical standards
- Highly resistant PVDF membranes suitable for backflush cleaning



Applications of SubTriq® technology

The SubTriq® technology is suitable for the treatment of different kinds of biological degradable wastewater. It is especially beneficial for:

- High discharge standards
- Water reuse
- Upgrade of existing plants
- Small footprint requirements
- Avoiding bulking sludge problems

The SubTriq® technology can be applied for:

- Buildings
- Food industry
- Paper industry
- Domestic wastewater
- Chemical industry

Case Southern Cross West Tower, Melbourne Australia

A clear example of a SubTriq® system is our 50 m³/day SubTriq® designed for the new Southern Cross West tower on Bourke Street, Melbourne, VIC.

This plant is able to treat 50 m³ of black and grey water per day and will produce class A standard water. The treated water is used to flush the toilets inside the building.

Technologies used are; Biological degradation (Nitrification / Denitrification / Heterotrophic oxidation), Ultrafiltration, Active carbon filtration, UV disinfection.

This office building was able to receive a 5 star green rating.

(Green Star is a comprehensive, national, voluntary environmental rating system that evaluates the environmental design and construction of buildings.)

For further information:

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