
Grundfos helps an innovative Australian water utility

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THE SITUATION

The Gippsland Water Factory is a wastewater treatment and water-recycling scheme that is being implemented in Maryvale, in the Gippsland region of Victoria.

Fully developed, the multi-stage scheme will treat up to 35 million litres per day of domestic and industrial wastewater, eight million litres of which will be recycled for use by local industry.

Construction of the \$130 million dollar project started in 2007 and commissioning is scheduled for 2009.

The Gippsland Water Factory will be the first of its kind in Australia, and the wastewater treatment processes will be ground breaking technology.

Wastewater will be reclaimed using biological treatment followed by microfiltration and reverse osmosis. The Gippsland Water Factory is expected to result in numerous benefits, and will make a significant contribution to the restoration of Gippsland's waterways and the conservation of its lakes.

THE GRUNDFOS SOLUTION

In determining the implementation of Stage One of the Factory, advice was sought from Grundfos.

Gippsland Water Factory wanted to treat up to 35 megalitres of sewage and wastewater per day, including water from the nearby Australian Paper Mills and a tannery.

TOPIC:

Wastewater treatment

LOCATION:

Victoria, Australia

COMPANY:

The Gippsland Water Factory

Following exhaustive investigations and research, Grundfos provided a combination of right mix pumps to Gippsland Water Factory. These included:

Grundfos Hydro MPC-E Booster Packages

Submersible SEN, SEV, SRP, S1, S2, S3, SEG, EF and Unilift AP Pumps

Grundfos PACO Axially Split Case and SS End Suction Pumps

Grundfos NKG End Suction Pumps

Grundfos WTE Ejectors Grundfos Chemical Dosing Packages

THE OUTCOME

In Stage One, 32 megalitres of raw sewage is treated through reverse osmosis using bacterial treatment and filtration.

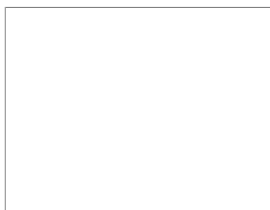
Eight megalitres of water is treated to an extra high standard and recycled to Australian Paper, which purchases the water. By selling recycled water to Australian Paper, Gippsland Water Factory will save about three billion litres of fresh water in the Moondarra/Latrobe system each year for use in Gippsland.

The remaining 24 megalitres of treated wastewater is sent down the regional outfall sewer (ROS), free of odour causing organics. Removing raw sewage from the ROS and significantly reducing odour in the open channel section is the key driver of Gippsland Water Factory.

The overall result is a savings of about three billion litres of freshwater a year (the equivalent of 1,200 Olympic swimming pools) - be it for environmental flows in rivers, drinking, or to support further growth in the area.

And Grundfos is delighted to have been a part of its exciting Australian "first".

Related Products



HYDRO MPC - PRESSURE BOOSTING BUILDING SERVICE APPLICATIONS

The Grundfos Hydro MPC booster systems are made to the very highest standards. Thanks to the CU 352 controller, they handle even the most difficult boosting jobs with ease and accuracy.



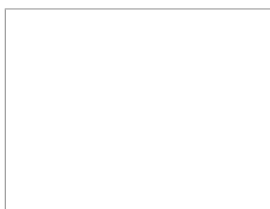
SE 1.1-11 KW DRAINAGE, EFFLUENT AND SEWAGE PUMPS - HEAVY DUTY

Drainage, effluent and sewage pumps



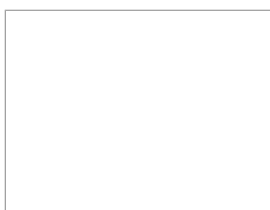
S PUMP - SUPER VORTEX SINGLE OR MULTI CHANNEL IMPELLER

Pumping of raw water, unscreened raw sewage, water containing sludge, industrial effluent



NK, NKG, NKE, NKGE END-SUCTION LONG-COUPLED PUMPS

Grundfos offers a virtually limitless range of long-coupled (NK) end-suction pumps



SEG GRINDER PUMPS - PUMPING OF WASTEWATER WITH TOILET WASTE

SEG pumps designed for pumping effluent and untreated sewage in small communities