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## *Gippsland water gets A-grade treatment*

When operational, the Gippsland Water Factory near Maryvale, Victoria will treat up to 35 million litres of domestic and industrial wastewater each day—that's more than 1000 average-sized backyard swimming pools. What's more, it will convert treated domestic wastewater into Grade A recycled water for industrial use. Construction is underway and is scheduled for completion at the end of 2008.

Half of the effluent in this sewer comes from a local paper mill. This effluent will now be treated at the Factory before being released to the sewer. The Factory will make available eight million litres of recycled water to the mill, freeing up water for drinking and other purposes.

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'While the individual treatment unit operations are not new, the use of a membrane bio-reactor for treating paper mill effluent is a world first. This is a new, combined application for treating this kind of effluent,' says Andrew Hodgkinson, Technical Director of the Gippsland Water Factory Alliance.

Schneider Electric, a leading supplier of electrical and automation control solutions, is helping Gippsland Water Factory meet its energy saving goals. Awarded a contract in the order of \$1.5M to supply electronic motor control products to the Factory, the company impressed by demonstrating its products onsite to ensure they would operate effectively.

'We chose Schneider Electric's variable speed drives, high voltage switchgear and medium voltage transformers after an extensive selection process which evaluated technical and cost alternatives from a number of suppliers,' says Chris Madsen, Lead Instrumentation and Controls Engineer at the Gippsland Water Factory.



Schneider Electric's success is partly due to its expertise in harmonic cancellation, a field that the company's New Zealand Napier team has been working in for the last 15 years. 'We're the technical leaders in the field of harmonics in Australia,' says Michael Burgess, Product Application Engineer at Schneider Electric. Electrical harmonics are essentially electrical pollution, which manifests as problems such as heat and power distortion in the cables and transformers.

Gippsland Water Factory will eventually be on show for all to see. The plans include an on-site interpretive centre that will showcase the technology used in its treatment processes. A water conservation and sustainability education program is also in the planning, to include information kits with interactive exercises for schools. The Factory is much more than an infrastructure project—it will leave a lasting legacy for the Gippsland community and environment.