

## Victorian Recycled Water Plant

This Victorian Recycled Water Plant is located in Connewarre and provides high quality recycled water for residential, industrial, agricultural and community uses. The precinct is also home to the existing water reclamation facility and bio solids drying plant. The plant supplies high quality Class A and consistent quality Class C recycled water for a range of customers and uses.

To meet growing demand, the site was to be expanded. Treadwell was selected to aid in the design and supply the necessary SureLine® odour control covers, supported by ArchitEX™ structural profiles, as a solution to the challenges the project posed.

### Project Challenges

- A high live loading of 5Kpa was specified and a maximum deflection of 7mm (at 5Kpa) was required.
- The replacement FRP covers had to be manufactured to suit the specific sizes to match the existing structures.
- Exposure to the corrosive wastewater environment was also a concern.
- Maintenance of structure over time was required to ensure the least amount of time, effort and cost in this remote area.
- Being large structures, there was concern that these stacks might affect radio frequencies.
- Electrical conductivity of these structures was also deemed to be a safety hazard.

### PROJECT INFORMATION

Project Category:	Wastewater recycling plant extension
Scope of Work:	New inlet works
Treadwell Products:	SureLine® FRP Odour Control Covers ArchitEX™ FRP Structural Profiles



### Treadwell Solution:

- 1 Treadwell's EcoEX™ SureLine® were designed and engineered to meet the deflection and live load requirements as well as customised to suit the sizes of the existing structures.
- 2 Durable and corrosion resistant FRP was chosen as the material of choice to avoid long term environmental issues.

- 3 Given the nature of FRP, any system utilising it is virtually maintenance free, thus keeping maintenance costs as low as possible.
- 4 FRP is transparent to radio frequency transmission and is non-conductive in nature. This makes the material ideal for applications that need to avoid electrical currents and radio frequency.