e-Bulletin
Business Relations

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Co-digestion at our Glenelg Wastewater Treatment Plant

Liquid high strength organic waste disposal and energy recovery

In managing high strength organic waste we must balance the impact on our network, the environment and the cost of treatment.

We accept high strength, carbon rich organic waste from industry at our Glenelg Wastewater Treatment Plant, where it's treated using an anaerobic treatment processes.

Getting approval for waste to be accepted for co-digestion

If you have waste you think may be suitable for co-digestion, you can lodge a high strength organic waste disposal application form with our Trade Waste Team (or through your Business Relations Consultant). Please include as much detail as possible about the waste to help speed up the assessment process. Contact us on 7424 3753 for further information on the application process.

Sampling and Laboratory Trial

Some preliminary laboratory testing can help indicate how suitable a waste may be. Your specific business will help us assess which particular tests we must carry out as part of the assessment.

Final Report

Following a full assessment including sampling and laboratory trials, we will produce a final report detailing the performance of the waste before making a decision on our ability to accept the waste for co-digestion.

Fees and Charges

Currently we accept high strength organic waster **free of cost** at our co-digestion facility. This is due to the benefit of electricity offsets coupled with the benefits of our sewerage network.

Treatment high strength organic waste in this way has benefits to both us and you:

Benefit to SA Water	Benefit to Customer
• Removal of corrosive waste from the sewerage network prolonging life of the network	• Reduced volume of industrial waste to sewer
• Increased biogas production in the treatment plant digester offsetting electricity costs	• Reduced weight of contaminants being discharged to sewer
• Removal of significant contaminants incurring treatment costs in the treatment plant	• Reduced trade waste bills due to reduction in volume and contaminants
• Removal of significant volume and contaminants which frees up capacity within the network and our treatment plant	• May resolve compliance issues due to discharges having a greater contaminant concentration than authorised limits

Volume Load Based Trade Waste Calculator

Updated trade waste calculator available to download at our website

This handy calculator is designed for Trade Waste Volume and Load Based customers to assist in understanding trade waste costs associated with discharge from their site.

The calculator has been recently updated to include up to date charges and to improve usability.

This is a helpful tool to estimate upcoming costs associated with your discharge, plus estimating the cost benefit of reducing certain parameters and planning upgrades to decrease loading.

Please find the calculator on our website.

Gold Coast Water learning from our experience

Gold Coast Water has developed a new master plan and business case to significantly expand their wastewater reuse network. There are a number of factors driving this project including:

- the recognised benefits of irrigating open space in the Gold Coast for urban cooling and improved liveability
- economic benefits through boosting availability of water resources for the expanding horticultural sector and
- Preventing the need to construct a very expensive ocean outfall to dispose of excess wastewater.

Gold Coast Water recognises the leading role we are playing in recycled water systems and wanted to learn from our experience to achieve their recycled water goals.

On 22 November 2018, Kevin Page (Gold Coast Water Program Manager) and Jim Pruss (Advisor to Gold Coast Water) met with our people and toured our recycled water facilities and the sites of two of our recycled water customers. Sites visited included:

- Adelaide Airport Managed Aquifer Recharge Scheme.
- Glenelg Adelaide Recycled Water Scheme treatment facility
- Adelaide Shores Golf Course and Caravan Park irrigation system (SA Water Recycled Water customer)
- Virginia Pipeline Scheme (VPS) treatment and storage system at Bolivar
- Bolivar onsite irrigation systems
- Marrone Produce irrigation system and production site (VPS customer)

Gold Coast Water will use the experience gained from their visit to further assist them in understanding the complexities of the issues and successfully work with the community, potential reuse customers and regulators.

SA Water gets smart with Gawler's gases

Advanced smart sewer technology trial

Gawler is one of two locations part of our new $5 million trial of advanced smart sewer technology, aiming to reduce the incidence and impact of sewerage network faults on its customers and the wider community.

Smells coming from the sewerage network will be monitored by 88 new odour detection sensors and 10 weather stations, to build a better understanding of odour behaviour and movement, and improve proactive management of the issue over time.

The focus in the township north of Adelaide will be improving the management of odours, where detectable levels have been consistently above average in some areas of the town.

We are one of the first Australian water utilities to use the technology in a comprehensive whole of suburb approach.

Our Senior Manager of Asset Management, Peter Seltsikas, said it's normal, and in some cases necessary, to have some odour emission, but the aim is to limit how noticeable it is for nearby residents.

"Vent stacks deliberately draw in fresh air or release small amounts of foul air, which helps to extend the life of the pipes, but for the most part, these smells shouldn't be detectable by people in the area," Peter said.

"The underground sensors particularly – which can be remotely monitored – will become our eyes and ears.

"The weather stations will monitor climatic conditions like wind direction and air temperature, which can impact the way odours move and are experienced outside our network.

"Weather is usually the reason sewer odour is so intermittent, but if we can learn what it's doing in near-real time, we could for example, time our network ventilation for when the community will be least impacted."

We are also piloting its smart wastewater network in Stonyfell; a suburb in theAdelaide foothills where flow and level sensors will be monitoring the movement of sewage to help detect pipe blockages and prevent overflows.

"As this is the first time we'll be trialling the equipment, it's all about increasing our knowledge of the network. We will then look at how we can use this information to make operational changes which benefit our customers," Peter said.

These two pilots are in addition to an expansion of our smart water network to four new locations across the state – Athelstone, North Adelaide, Penneshaw and Port Lincoln – after the success of a trial in the Adelaide CBD that has prevented 29 water main breaks since going live in July 2017.

"The success of the technology to date gives us confidence in achieving meaningful results in our wastewater operations," Peter said.

"The combination of technology across our water and wastewater networks, a world-leading analytics platform and the expertise of our smart network team will give us a more detailed view of our underground systems than ever before, and help us continually improve our customers' experience."

We are investing approximately $9 million for the roll-out of expanded smart water and wastewater networks.

Installation of all equipment is underway and planned to be transmitting near real-time information back to our Operations Control Centre by end of the year, with the full benefits expected to be realised by mid-2019.

Smart Meter Leak Alerts

Customer Water Use Portal – Proactive leak monitoring

Since 2016 we have offered a smart metering product through our Customer Water Use Portal.

The Portal provides customers with access to detailed water consumption data right down to a 15 minute interval, as well as summarising consumption into hourly, daily, weekly, monthly and yearly intervals.

Since the launch, it has helped our customers achieve water efficiency improvements, while also circumventing many high water use issues through leaks and equipment malfunctions.

We have been recently working hard to develop this product and piloting a new service which takes a more pro-active approach to monitoring consumption data and getting in touch with portal customers when we notice potential issues.

This will see the development of smarter calculations in our data storage to determine base flow through individual water meters which can be assessed for changes in water use patterns.

This service is proving worthwhile, with several leaks already identified to customers and resolved before they escalate. Last month alone we alerted customers to a combined leakage rate of approximately 50 litres per minute, which means a saving of over 70,000 litres per day.

The Customer Water Use Portal is available as a fee for service product. More information can be found via our website here: https://www.sawater.com.au/business/products-and-services/customer-water-use-portal2