

## Business Relations

### Issue 16 – February 2015

#### New name for the e-bulletin – Business Relations

##### e-bulletin combines existing technical format with Business Relations news and topics

To provide more coverage on information from SA Water we have expanded the scope of the e-bulletin moving forward to include topics from the Business Relations side of our team. You will still receive technical related information as always, but we will now be including information on other SA Water topics relating to your business such as the first topic in this edition on the SA Water Billing Process.

If there are any topics that you would like to see in future e-bulletins, please do not hesitate to suggest these by return email.

#### Business Relations Basics

##### SA Water Billing Process

Our Business Customers often ask us how SA Water generates its bills, what information is contained in each and why bills are received when they are. A detailed explanation of our bills can be found in the section [‘Understanding your Account’](#) on the SA Water website, but some of key features are explained here.

SA Water prepares its bills according to geographical billing ‘groups’. In order to calculate water consumption, SA Water engages a contractor to read every Business customer meter across the State at quarterly intervals. The same contractor also reads residential meters. Because SA Water has approximately 750,000 accounts, it would be impossible to read all of these customer meters in the same 3 month period and issue the bills at the end of this time. Consequently, meters are read, and bills generated according to geographical billing ‘groups’.

Each Council area is assigned a number, which comprises the first 2 digits of your account number. For example, customers in Tea Tree Gully have the prefix ‘28’ on their account number, Onkaparinga has ‘86’ and so on. Meters in certain council areas are read together and these comprise the billing group. Each billing

group is processed by the SA Water billing team, at different weekly intervals, hence why bills are received at different times, for different customers.

In terms of the content of a Business Customer bill with regards to charges, the major components contained in each should be:

- Quarterly Supply Charge for Water
- Quarterly Supply Charge for Sewer (if applicable)
- Water usage in kilolitres, and the period within which this has been used
- River Murray Levy (if applicable).

The back of the bill contains details of the number of Meters at that particular site and the Meter identifier or number for each. It will also have the individual meter readings and their usage.

The bill Pay by Date can be found in the top right hand corner. This is important to know, in order to avoid any late payment charges.

If you think that there is an item missing from your bill, or have any other billing related issues please contact your Business Relations Contact, or the Business Relations team on (08) 7424 3753.

Another question we are often asked is the origin of the Capital Value of a customer's property. This figure, which can also be found on the front of the bill, is determined by the Valuer General's Office and if you are a Non-Residential business customer, will determine your sewer charge, and if you are a Commercial customer, will determine both your water supply charge and sewer charge. The back of the bill explains the steps to follow if you object to the property value that your property has been assigned. The Value General Department can be contacted by post, email or phone.

## Technical Series

### 'Buffer' tanks – how they can help improve trade waste quality

In our last e-bulletin we discussed how grease arrestors operate and how to optimise their performance in removing fats, oils and grease from wastewater discharges. In this article, we move upstream and discuss how buffering tanks can help improve trade waste quality and the performance of downstream pre-treatment.

Tanks can be used for different purposes on industrial sites and are commonly referred to by different names. Buffer tanks may be called balance tanks, storage tanks, dosing tanks, equalisation tanks depending on how they're used on site.

In this article we describe how buffer tanks can be used in industrial wastewater treatment.

## 1. Flow control

Most pretreatment devices will be designed to operated effectively within a specified range of flow rates. Further to this under a Trade Waste Authorisation discharge is permitted at a set flow rate. At many industrial sites, the flow and quality of wastewater from its origin will vary significantly as production and processes change. 'Buffer' or 'balance tanks' provide the opportunity to moderate the flow of water to pre-treatment systems to mitigate hydraulically overloading pre-treatment devices or discharging over set limits to the sewer.

## 2. Wastewater quality equalisation

Collecting screened wastewater in a buffering/holding tank for a sufficiently long period before further treatment moderates short-term variations in wastewater quality. This provides another protection barrier to highly concentrated wastewater potentially degrading pre-treatment devices or entering the sewer.

## 3. Temperature control

Elevated temperature or hot 'slugs' of material can emulsify grease and oils resulting in a higher percentage of carryover through grease arrestors and other pretreatment systems. A 'buffering' tank will allow time for wastewater to cool before it reaches pre-treatment devices. A tank of suitable construction needs to be installed to withstand temperature.

## 4. pH control

pH inconsistencies can result in potential damage to treatment equipment, odours and non-compliance with the trade waste discharge limit of pH 6-10 at all times. Buffering of pH by mixing acidic and alkaline discharges in 'buffering tanks' might eliminate the need for chemical pH correction, or reduce alkali/acid dosing costs and their undesirable Total Dissolved Solids (TDS) impact.

## 5. Segregation and storage of High Strength Waste

Highly concentrated wastewater that is not suitable for the sewer network is often hauled away in liquid waste removal trucks to dispose of effectively. However, holding wastewater for excessive periods due to overly generous buffering capacity or delays in processing wastewater can lead to degradation of influent, odours and lower wastewater pH.

## 6. Other Considerations

Careful investigation of wastewater quality and flow variations is needed to arrive at an effective buffering/holding tank capacity and design. The minimum capacity varies significantly between individual applications, particularly industrial sites. However, a typical minimum buffering tank capacity of 4 hours at design peak influent flow rate is required for centralised retail applications.

Appropriate mixing of tank contents ensures that solids and fats do not separate out, and tank contents remain aerated to minimise odours from biodegradation of waste before treatment.

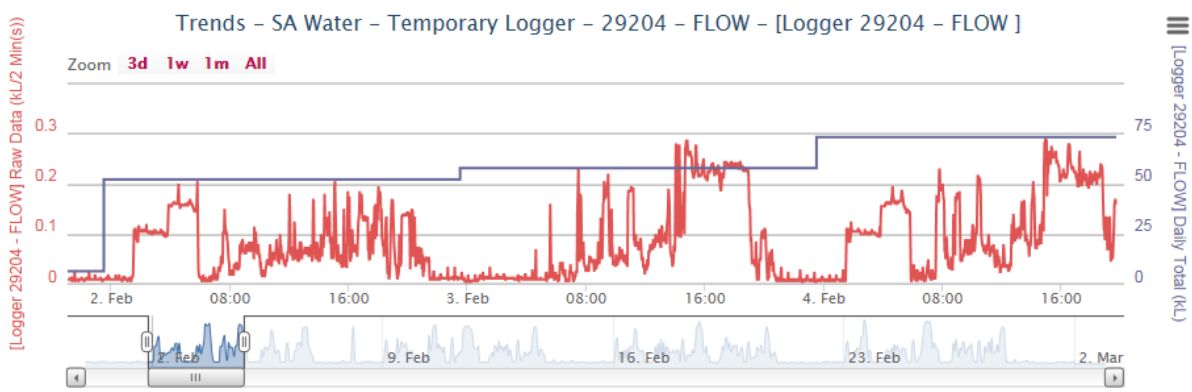
Extra contingency capacity in buffer tank storage is advisable for emergencies (e.g. pre-treatment maintenance shutdown, sewer unavailability). It also allows for increasing the normal operating levels, if required to achieve the desired buffering of wastewater.

## SA Water Customer Web Portal Pilot Project

### Piloting online customer access to daily water consumption information

A pilot project is underway with some of SA Water's business customers, trialling smart metering technology and online access to water use information.

The online portal system receives water meter data sent by logging equipment installed on customer water meters, and processes it into intelligent information that can be accessed by customers to monitor usage. The system logs water use at regular intervals throughout the day and provides easily interpreted data to customers to better understand water usage patterns. This provides an innovative means of identifying opportunities to improve water efficiency, detect leaks through leak alarms and report easily on water use for environmental reporting.



The system has already helped some participating customers to identify leaks and opportunities for improved water efficiency. Through using this type of technology it is not uncommon to identify baseflow water use which could be leakage of between 5 and 15 litres per minute.

The pilot will run for 12 months and is being used as an opportunity to better understand how a system such as this could be implemented permanently for business customers.

#### Disclaimer:

SA Water's Business Sustainability Group provides recommendations and suggestions only. It is advised that further investigations are detailed studies are completed before any projects are implemented. All applicable standards & guidelines (Australian, EU, AQUIS, HACCP, Australian Drinking Water Quality Guidelines et.c) should be adhered to, and care should be taken to ensure water and wastewater minimisation programs do not negatively impact health or processing operations.