

# Frequently asked questions: **Trade Waste**

Trade waste is any liquid waste generated from commercial or industrial business activities that is discharged to the sewer. Trade waste can contain oils, grease or chemicals that have adverse impacts on the sewerage system. Domestic sewage including the liquid waste from household toilets, bathrooms, kitchens and laundries, is not considered trade waste. Generally trade waste requires pre-treatment prior to discharge to ensure it is compatible with the sewer pipes and treatment systems.

## **Why worry about trade waste?**

When dealing with trade waste, it is vital to protect:

- The health and safety of Western Water staff and customers.
- Sewer assets from corrosion.
- The sewerage treatment process
- The quality of recycled water and
- The health of our waterways.

The volume and quality of trade waste must therefore be controlled.

## **What approvals are needed for trade waste discharge?**

Trade waste may only be discharged into the sewerage system with Western Water's permission. This is either through a Trade Waste Agreement or Consent.

Discharging trade waste to Western Water's sewerage system without approval is illegal and can attract penalties.

An agreement or consent negotiated between Western Water and a business will depend on the type and amount of waste that the business generates. It may require effective pre-treatment of the trade waste and regular maintenance of the pre-treatment device by the trade waste generator. Common pre-treatment requirements include grease removal facilities, but more complex discharges may require sophisticated pre-treatment systems.

Regular inspection by Western Water and sampling to determine the quality of the trade waste may also be required.

## **What are the responsibilities of trade waste customers and Western Water?**

A trade waste customer is responsible for:

- Ensuring they have written permission from Western Water in the form of a current Trade Waste Agreement or Consent before discharging into sewers.
- Being aware of trade waste requirements and conforming to the conditions of the approval.
- Ensuring any pre-treatment systems installed are functioning correctly and are adequately maintained.

- Ensuring that additives used in the pre-treatment process have been assessed by Western Water and are certified by a suitably qualified professional as being harmless to the sewerage reticulation/treatment system and the environment. The customer must advise the property owner before using any additive.

Western Water is responsible for:

- Ensuring that trade waste customers comply with the requirements of the Water Act 1989 and the Environment Protection Act 1970.
- Approving plumbing and drainage plans using an appointed external service provider.
- Approving pre-treatment devices installed at the site of the trade waste customers.

## **Who pays for dealing with trade waste?**

For many years Western Water has met the majority of the costs incurred in dealing with trade waste. The majority of trade waste customers were only paying the nominal fee per annum regardless of the quantity and quality of the trade waste discharged. Western Water incurred the cost of pumping the trade waste to its recycled water plants and the energy and other costs associated with effective treatment of the waste.

A user pays cost recovery system is being introduced gradually in line with the method identified in the 2005 Essential Services Commission (ESC) approved Water Plan. This method is similar to that in use by many other water authorities. The ESC is the state government agency that independently approves pricing structures introduced by water authorities.

The cost recovery system is based on the volume of the trade waste and component characteristics of the waste and Western Water's costs to render the waste suitable for recycling either to a waterway or for recycled water use around our towns in the region.

Over the next 5 years, charges will gradually increase to cover the full cost of effective management of trade waste in Western Water's region.

## How are the charges determined?

The charge is based on the volume and the quality of the waste, i.e. the organic content (measured as Biochemical Oxygen Demand) and the concentration of suspended solids.

The charge is also affected by risk factors such as trade waste compliance history.

The trade waste charge may consist of three components:

1. An application fee for new customers, to cover the assessment of applications.
2. A management fee to cover site inspections, monitoring, administering and reviewing Trade Waste Agreements.
3. A volume and quality charge, based upon the risk rating to cover collecting, transporting, treating and disposing of trade waste as well as managing environmental impacts.

## Why do the charges vary from customer to customer?

Trade waste customers are divided into one of the following categories, based on their volume and waste quality;

Category A customers are those discharging less than 1000 litres of trade waste per day. They are also considered Risk 1 customers. These customers pay the minimum management charge and will not be charged for volume or quality of their waste. The majority of Western Water customers fall in this category and typical customers include take-away food shops, bakeries, fast-food shops etc.

Category B customers are those discharging 1,000 litres to 10,000 litres of trade waste per day with less than 400 milligrams of organic content or solids per litre. Due to the volume of discharge, customers in this category are considered Risk 2 customers. Category B customers will be charged a management charge and volumetric charge. Typical Category B customers include swimming pools, hospitals, car washes etc.

Category C customers are those discharging 1,000 litres to 10,000 litres of trade waste per day with more than 400 milligrams of organic content or solids per litre. Due to the volume of discharge, they are considered Risk 2 customers. Category C customers will be charged a management charge, a volumetric charge and a quality charge. Typical Category C customers include aged care facilities, large restaurants etc.

Category B customers will pay a higher unit charge for volume than Category C customers. This principle was adopted to provide Category B customers incentive to reuse relatively clean water within the business.

A summary of the charges for small to medium industries/commercial premises is shown opposite.

Quantity	Risk rating	Category	Charges 2009/10	
			Application fee	Management fee
Less than 1000 litres	1	A	\$109.77	\$213.25
1,000 - 10,000 litres	2	B	\$172.53	\$447.32
1,000 - 10,000 litres	2	C	\$172.53	\$447.32

For larger industries with higher risks, increased management charges apply. Please contact Western Water for more information.

### Volumetric Charges - 2009/10

Category B (low strength waste)*	\$1.0089 per kilolitre
Category C (high strength waste)*	\$0.6793 per kilolitre

\*Maximum charges, as approved by the Essential Services Commission, are \$1.2773 per kilolitre (Category B) and \$0.9018 per kilolitre (Category C).

### Quality Charges - 2009/10

Parameter	\$ Charges per Kg
Biological Oxygen Demand >400 mg/L	0.2657
Suspended Solids >400mg/L	0.1695
Total Phosphorus >30mg/L	0.3955
Total Combined Nitrogen >60mg/L	0.5087
Total Oxidisable Sulphur >100mg/L	0.7347
Sodium >250mg/L	0.1129
Arsenic >0.2g/day	0.1695
Heavy Metals - Cadmium >0.4g/day	0.1695
Heavy Metals - Chromium (III & VI) >100g/day	0.1695
Heavy Metals - Copper >100g/day	0.1695
Heavy Metals - Lead >100g/day	0.1695
Heavy Metals - Mercury >0.2 g/day	0.1695
Heavy Metals - Nickel >10g/day	0.1695
Heavy Metals - Selenium >10g/day	0.1695
Heavy Metals - Zinc >100g/day	0.1695

## **What advice can we offer customers to reduce the charge?**

One way to reduce the charge is to introduce water conservation measures and therefore lower water consumption. Attention should also be paid to reducing the overall levels of contaminants discharged, as simply concentrating your waste streams may not result in a decreased trade waste risk rating or reduction in fees. Increased concentration may also have an adverse impact on sewer assets.

Moves towards cleaner production (that is, less water consumption and less waste) can benefit both your business and Western Water. Western Water will be pleased to assist customers on practical procedures.

## **How is the volume of trade waste determined?**

Western Water generally does not meter the trade waste discharges to sewer, except for major customers, so the potable water consumption (rolling three year average) has been used with an industry adjustment factor to estimate the trade waste discharge.

In most instances Western Water has used a factor of 0.6 (for example, every 1000 litres of water consumed, 600 litres is estimated to go to sewer as trade waste), whereas other authorities use factors of up to 0.9 resulting in higher charges. The factor will be adjusted depending on site-specific use.

If a customer wishes Western Water to review the use of the discharge factor they either need to install a flow meter to measure actual trade waste discharges to sewer or provide satisfactory alternative discharge volume evidence.

## **How is the quality of trade waste determined?**

The trade waste quality is determined by the use of industry averages for similar businesses or, in some cases, by sampling undertaken directly at the business.

Western Water randomly selected a number of customers to cover a wide range of industry types and, based on the waste quality results and from results obtained from other water authorities, has built a database for typical quality for various industry types. Western Water will continue to refine the data as more information is collected.

A revision of the charges is possible if the customer provides satisfactory evidence of discharge quality that differs from Western Water's information.

## **Further information**

For further information on trade waste charges, please call Western Water on 1300 650 425.