

ACCEPTANCE CRITERIA FOR SMALL BUSINESS – PUB 06A



Introduction

The Water Corporation's wastewater system is primarily designed to service households with normal domestic wastewater. We also make the wastewater system available for industrial wastes wherever it is safe and appropriate to do so. Not all industrial wastes are compatible with our system.

This brochure describes the acceptance criteria that we use for assessing industrial wastes and how different types of wastes may need to be treated before we can accept them into the wastewater system. Some types of waste cannot be accepted into the wastewater system.

What Do I Have To Do?

Apply to the Water Corporation for an Industrial Waste Permit. Application forms are available from our website.

We will assess your business and identify what you need to do to make your sewer discharge safe. We may require you to install a pre-treatment fixture such as a grease trap or oil arrestor to partially treat your wastewater before it is discharged to sewer.

If we can accept the waste (after any required on-site pre-treatment) we will issue you with an Industrial Waste Permit. The permit will allow you to discharge the waste under specified conditions.

Why do we Need Acceptance Criteria?

Discharges to sewer which do not meet our acceptance criteria could have serious consequences for people's health, or the environment.

Unauthorised discharges could result in:

- A threat to the health and safety of workers within the wastewater system
- Damage to the urban wastewater system, or poisoning of the biological processes at our treatment plants
- A threat to public health directly from your discharge, or from any sewer failures which might be caused by your discharge
- An inability to reclaim and re-use our treated wastewater, or our Biosolids treatment by-products, in industry or agriculture; or
- A threat to the environment from any failure of the sewer system, or by contaminants which cannot be removed by our treatment processes.

By applying our acceptance criteria, and requiring appropriate pre-treatment at the source of the discharge, we can maximise the availability of our wastewater system for industrial wastes, while keeping the environment and our community safe.

Substances Subject to Acceptance Criteria

These acceptance criteria are based on wastewater industry standards and Water Corporation investigations.

Biological Oxygen Demand (BOD)

Wastewater with high organic content can overload our treatment plants, or disrupt them by altering the nutrient balance within our system. However, the relatively low volumes of discharges from small business are rarely sufficient for BOD to become an issue.

Suspended Solids (SS)

Suspended solids can cause silting within sewers and pumps stations, leading to blockages, failures and overflows. Suspended solids also result in excessive loading of grit at treatment plants, increasing costs and risk.

We generally require an appropriate form of pre-treatment to physically separate the solids from your wastewater before it goes to sewer. For most small businesses, a simple silt sump or a bucket/plaster trap is normally all that is required.

Fats, Oils and Grease (FOG)

Fats, oils and grease can coalesce and solidify in the sewer, particularly as it cools. Water level sensors and pump switches can get fouled by grease, causing sewerage overflows when pumps fail to start.

We generally control FOG wastes by requiring pre-treatment at the source. This usually requires a grease trap for commercial kitchens, or an oil arrestor in automotive trades.

Metals

The main reason for limiting metals is to protect the environment, which can only absorb these contaminants in relatively small quantities. Metals entering our system are not destroyed, and will ultimately re-enter the environment.

Excessive concentrations of metals can also destroy the bacteria that we use in our biological treatment processes, and compromise their operation.

We place strict limits on the amounts of metals entering our system from each individual point of discharge. These limits are set such that the sum total of all metals discharges from all of our customers remains well within safe levels for the environment.

If your metal concentrations and quantities are beyond these limits, then we may not be able to accept your waste, or we may require an appropriate pre-treatment to remove them.

Chemicals

A wide variety of chemicals exist, many of which have a variety of impacts on our wastewater system, or present risks to the ultimate receiving environment.

Acceptability of chemical-laden wastewater is assessed on an individual case-by-case basis, and pre-treatment techniques specific to the particular chemicals of interest may be required, if they are available.

Extremes in pH

Excessive acidity or alkalinity can cause corrosion of our sewer system and pump stations, resulting in extensive damage across a wide area. They also pose an immediate danger to our wastewater system workers.

We generally require some form of dilution or neutralisation of excessive pH prior to sewer discharge.

Temperature

Hot water can flush grease and other deposits away and concentrate it in cooler parts of the sewer system, where it coalesces again to cause blockages.

We cannot accept any discharge above 38°C, and we require that any dishwasher or washing machine wastewater is separately plumbed to bypass any grease trap or oil arrestor which you might have installed.

Flammable Liquids

Flammable or volatile liquids can cause fires or explosions in sewerage systems, and are a danger to our workers. They cannot be accepted into the sewer system.

Stormwater

Discharging stormwater to the sewer is not permitted, except where you have specific approval from us for connecting an uncovered outdoor wash bay.

Other Limitations

Other substances subject to acceptance criteria include limitations on freshwater, radioactive substances, genetically modified organisms, and infectious substances. Please enquire if you think these criteria may apply to your situation.

The current version of this information sheet is shown on the Water Corporation Internet site at http://www.watercorporation.com.au/industrialwaste_index.cfm. This version dated 18 December 2007. Further information on the issue detailed on this sheet can be obtained by phoning 13 13 95, or visit your nearest Water Corporation office.