Guideline

Trade waste requirements for craft breweries

Contents

Introduction

All customers who want to connect and discharge trade wastewater to our assets must first seek our written approval. This guide applies to craft breweries discharging less than 12 kL/day and outlines our conditions and requirements for discharge of trade wastewater into our wastewater system.

Please note that if retail food is being prepared on site you must also seek approval from us. Please refer to our *Plumbing for retail food businesses* guide at sydneywater.com.au for more information.

Steps when seeking approval to connect and discharge trade wastewater

1. Apply for a connection agreement with us through Sydney Water Tap in™.
2. If you already have an existing connection agreement, you should apply to 'connect and discharge to sewer' on Sydney Water Tap in™ before you purchase your equipment to ensure you are able to connect the equipment to our system.
3. One of our Business Customer Representatives will case manage your application through to approval.

Requirements

To obtain a Sydney Water approval, you will be required to ensure the following requirements are met.

1. **Screening** (Sydney Water approved in-floor bucket traps).

   You must install authorised in-floor waste bucket traps in all dedicated trade waste streams of the brewery.

2. **Dedicated collection pit**.

   You must install a collection pit of at least 500L

3. **Automatic pH correction**.

   You must install an automatic pH control unit to adjust pH to within the acceptance criteria of 7-10 (We do not allow any discharge to our wastewater system outside of that range).

4. **Electromagnetic flow meter**

   You must have an electromagnetic flow meter to measure the volume of trade wastewater you discharge.

5. **Backflow protection**.

   You must comply with our backflow requirements as detailed in our *Customer Contract*. This means you must engage a backflow-accredited licensed plumber to install and test backflow containment device(s), at the property boundary next to the water meter(s) servicing your property.

Flow measurement and automatic pH correction

Flow measurement

You must install an electromagnetic discharge meter to measure the volume of trade wastewater you discharge to the wastewater system. Installing new discharge flow meters requires a certificate of verification at the time of installation. You must repeat this verification at least once every 12 months according to the manufacturers' specifications.

The flow measurement equipment must be:

- located immediately downstream of the pre-treatment plant, so the total discharge can be monitored.
- hardwired to the electrical supply.
- full pipe in line electromagnetic flow meter and capable of electronic verification
- of standard pipe sizes: 25 mm to 150 mm.
- accurate to plus or minus 2% of the actual flow at the lowest typical flows.

You must record all discharge to our wastewater system.

Power supply:

- Instrumentation must be hardwired and housed in a weatherproof enclosure with a clear front, where it can be easily accessed.

Visual display:

- Preferred display is LCD or LED digital format.
- The display must show instantaneous flow rate in litres per second (to one decimal place).
- The totaliser must be set in kilolitres (minimum six digit) with no external reset. (For some small volume dischargers or companies with low flows, the totaliser may be set in litres, but we must specifically approve this. You must display any change from kilolitres must on both instrumentation and enclosure).
- The totaliser must be capable of retaining its reading in a power failure.

Commissioning, maintaining, and verifying flow meters

Verifying

When you install a flow meter, it must be commissioned and verified on-site. This includes having the desired units of measure (such as litres per second, total kilolitres discharged). You must enter the pulse output information.

Maintaining flow meters

You must maintain the flow meter in good working order, following the manufacturer's instructions. To maintain integrity of the flow meter you must also regularly maintain all pipework.

Calibrating flow meters

Manufacturers test and calibrate flow meters under controlled conditions before the meters leave the factory. When installed, the flow meter must be verified in place at your site. You must have the flow meter verified in place at your site, at least once every 12 months. You must submit a Certificate of Verification to us at least once every 12 months, for every flow measurement instrument installed. You must verify your flow meter on-site using equipment that is NATA approved and fully traceable to National Standards. Verification equipment must have a capability test within a range of +/- 2% of the required specification.

Automatic pH control

All breweries require an automated pH control unit to be adjustable to ensure wastewater is within our acceptance criteria (between 7-10) before you can discharge to our system.

We recommend your pH control should either be in-line control (before entering the collection pit) or recirculating using the collection pit as an equalisation tank. Both methods must be automated with control units. We also recommend you ask a consultant to identify the best way for you to achieve pH correction.

Definitions

Term	Definition
Customer Contract	Contract between Sydney Water and the Customer. Legally enforceable document and a requirement of the *Sydney Water Act 1994.*
Connection Agreement	You must have our written permission to connect to our systems. This is a requirement of section 48 and 49 of the *Sydney Water Act 1994.*