WASTE, FATS AND OILS GREASE TRAP REQUIREMENTS IN THE CLUTHA DISTRICT





CLUTHA DISTRICT COUNCIL www.cluthadc.govt.nz

WASTE FATS AND OILS; YOUR NON-RESIDENTIAL GREASE TRAP REQUIREMENTS

To prevent blockages and Waste Water Treatment Plant problems, Council requires all food businesses/premises engaged in the cooking, preparation or sale of food (e.g. restaurants, takeaways, hospitals, hotels, bakeries, butcheries and supermarkets) to install and regularly maintain a system that removes FOGs from the wastewater discharged from that business.

Explanations in this Leaflet are intended to assist you with installing a grease trap in conjunction with an application for a building consent and/or application for discharge of trade waste.

The Clutha District Council Water Services Bylaw 2019 includes the following clause in relation to discharges that may contain fat, grease or oil:

"33(7) Council may approve a Trade Waste discharge subject to the provision of appropriate Pre-Treatment systems to enable the Consent Holder to comply with this bylaw. Such Pre-Treatment systems must be provided, operated and maintained by the Person discharging, at their expense. Typical Pre-Treatment requirements will be defined during the Consent Process."

For any new or existing premises with trade waste discharges, pre-treatment will be sized appropriately, and no grease trap shall be less than 1,000L unless specific written approval is granted by an authorised officer. Existing grease traps with a functional capacity of less than 1,000 litres must apply for a Consent unless they can demonstrate compliance with the physical and chemical characteristics set out in Schedule 2 to Council's satisfaction.

A grease trap is required for all non-residential activities where cooking is undertaken with fat and oils.

TYPES OF GREASE TRAPS

There are two types of grease traps, 'passive' and 'mechanical':

- Passive grease traps shall have a minimum of two chambers and 1,000L capacity.
- Mechanical grease traps may have a smaller volume as they are not required to hold the

waste between cleans.

To reduce maintenance requirements a solids screen should be fitted to sinks.

Grease trap converters are not permitted. If chemicals are required to be added to change the compound (fats and oils), they will not comply. We recommend you contact the Council for advice.

All grease traps require a sample point located after the grease trap to provide the ability to sample the discharge and monitor effectiveness.

Prior to submitting a building consent application to the Council, ensure you show on your drawings:

- The location of the grease trap.
- The type and size of the grease trap to be used.
- The location of the sampling point.

LEGAL REQUIREMENTS

- Clutha District Council Water Services Bylaw 2019 (www.cluthadc.govt.nz)
- New Zealand Building Code G13 Foul Water (www.building.govt.nz)
- New Zealand Building Code G14 Industrial Liquid Waste (www.building.govt.nz)

PASSIVE GREASE TRAP SIZING GUIDE

The sizing criteria outlined below is a guide only. The Council will determine that correct sizing requirements are met on receipt of an application for discharge of trade waste. There are two methods that you can use to determine the appropriate size of a grease trap. Both are based on ensuring the wastewater has a minimum retention time of one hour.

Method 1

Fixture unit rating Add the fixture unit ratings for all fixtures that feed into the grease trap and multiply this by 100L. Check where this calculated volume lies in Table 2 'calculated grease trap size range' below to determine the corresponding recommended grease trap size required.

Example: If a restaurant kitchen has one double pot sink (5 FU), one single pot sink (5 FU) and one hand basin (1 FU), the maximum hourly flow that could be expected can be calculated as follows: $11 \text{ FU} \times 100L = 1,100L$. The recommended size therefore is 1,000L (from Table 2).

| FIXTURE | FIXTURE UNIT RATING | FIXTURE | FIXTURE UNIT RATING |
|---------------------|---------------------|------------------------|---------------------|
| Steamer | 1 | Kitchen sink | 3 |
| Wok (per burner) | 1 | Double kitchen sink | 3 |
| Hand basin | 1 | Pot sink | 5 |
| Rinse sink | 3 | Double pot sink | 5 |

Table 1. Fixture unit rating



Table 2. Recommended grease trap size

| MAXIMUM NUMBER OF FIXING UNITS | CALCULATED GREASE TRAP SIZE RANGE | GREASE TRAP SIZE REQUIRED |
|-----------------------------------|--------------------------------------|------------------------------|
| 13 | 701L - 1,300L | 1,000L |
| 17 | 1,301L - 1,700L | 1,500L |
| 26 | 1,701L - 2,600L | 2,000L |

Method 2

Peak flow rates Where the hourly peak wastewater flow rate is known, this can be used to determine the recommended grease trap size. Compare the peak hourly flow with the 'calculated grease trap size range' in Table 2 above to determine the corresponding recommended grease trap size required.

Example: The peak flow rate from a kitchen area is known to be 0.5L/sec. The recommended grease trap size is calculated as follows: 0.5L/sec x 3,600sec/hour = 1,800L/hour. Therefore the recommended size is 2,000L (from Table 2).

MECHANICAL GREASE TRAP

Must be operated in accordance with the manufacturer's instructions and sized according to manufacturer's recommendation; and may only be used with Council's approval.

The frequency with which Mechanical Grease Removal Systems are required to be serviced and/or cleaned out may vary. This frequency change may be determined by Council after a visual inspection and/or sample testing from the device outlet.

Any alternative Grease Removal Systems that do not meet the requirements contained in the Water Services Bylaw 2019 must be replaced with an approved device at the Consent Holder's expense

LIKE MORE INFORMATION?

Contact Council's Service Delivery Department on 0800 801 350

REPORT A SERVICE REQUEST OR STORMWATER

PROBLEM TO COUNCIL

Call 03 419 0200 or 0800 801 350 (Toll Free in NZ)

After Hours or Emergency call 0800 801 350

Email help.desk@cluthadc.govt.nz