



Explanations in this guide 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.

Background

New Plymouth District Council Bylaw Part 11 Trade Waste includes the following clause in relation to discharges that may contain fat, grease or oil:

16.3A For any new trade waste discharges or an upgrade to existing premises where the trade discharge may change, pre-treatment will be sized appropriately and no grease trap shall be less than 500L unless specific written approval is granted by an authorised officer.

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

Failure to submit the correct information may cause processing of your building consent to be delayed.

Would you like to discuss your project with a Trade Waste Officer?

You can contact a Trade Waste Officer at the Council on 06-759 6060 or email monitoring@npdc.govt.nz to discuss your project at any stage.

Grease traps

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

- Passive grease traps shall have a minimum of two chambers.
- 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.

Types of mechanical grease traps include but are not limited to Big Dippers and Grease Boss.

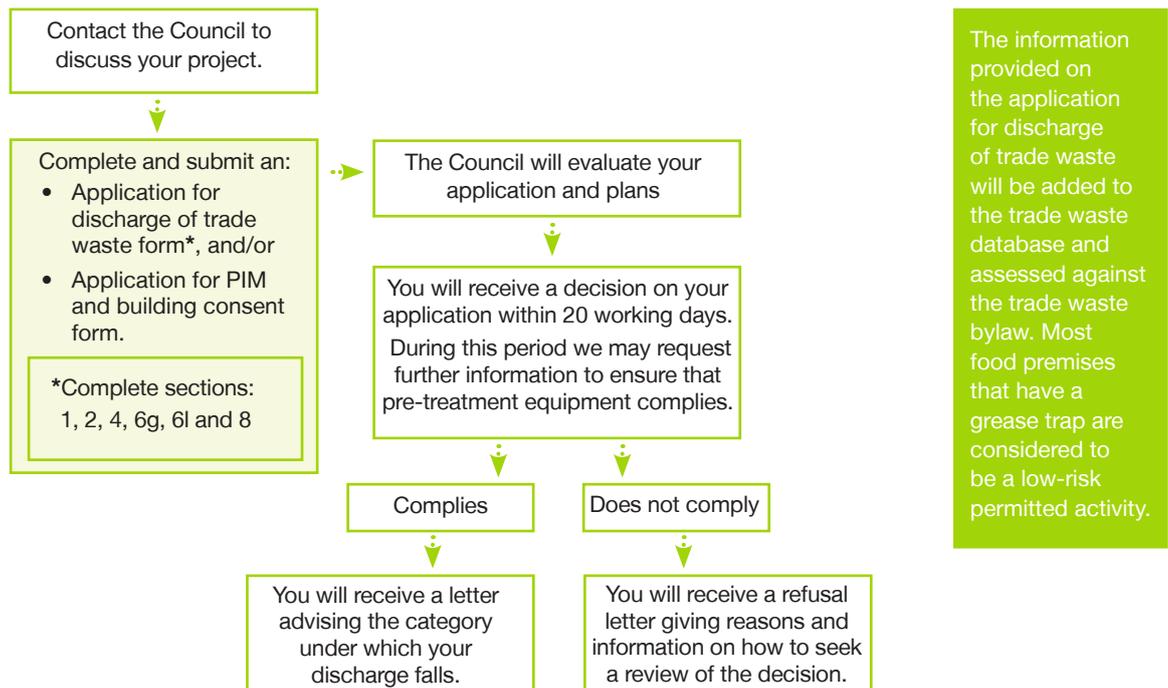
All grease traps require a sample point located after the grease trap to provide the ability to sample the discharge and monitor effectiveness.

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.

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.

Application process



Please turn over

Binding interpretation of the Acts, regulations and bylaws can only be issued by the courts. Indications and guidelines issued by the Council are provided with the intention of helping people to understand the legislation. They are however offered on a 'no liability' basis and in any particular case those concerned should consult their own legal adviser.

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: $11 \text{ FU} \times 100\text{L} = 1,100\text{L}$. The recommended size therefore is 1,000L (from Table 2).

Table 1. Fixture unit rating

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 2. Recommended grease trap size

Maximum number of fixture units	Calculated grease trap size range	Grease trap size required
7	100L - 700L	500L
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: $0.5\text{L/sec} \times 3,600\text{sec/hour} = 1,800\text{L/hour}$. Therefore the recommended size is 2,000L (from Table 2).

Mechanical grease trap information

Refer to the Council's website under Trade Waste for information about mechanical grease traps: www.newplymouthnz.com.

Other helpful sites:

www.clenz.co.nz.

www.mactrap.co.nz.