

## What is Trade Waste?

This is wastewater generated as part of any business activity. In the case of the food processing industry this includes discharges from the sinks, drains and equipment associated with either preparation or processing of any foodstuffs. The type of businesses that are included in this category are restaurants, bakeries, takeaway bars, hotels, nursing homes, marae, butchers, wholesale production lines, etc.

All activities discharging wastes as part of such an activity are required to have appropriate pre-treatment (such as grease traps) under the Building Act (Sections G13 & G14) and the Whangarei District Council Trade Waste Bylaw.

In order to manage this effectively, the District Council requires each business to be registered under the Trade Waste Bylaw that we can fully understand the needs of our customers, similar to a Health Licence. Forms are available from our main offices, website or by contacting Waste & Drainage staff to provide these.



### Whangarei District Council

Private Bag 9023, Whangarei 0148  
Forum North, Rust Avenue, Whangarei  
Phone: 09 430 4200  
Facsimile: 09 438 7632  
Toll Free: 0800 WDC INFO (0800 932 463)  
Email: [mailroom@wdc.govt.nz](mailto:mailroom@wdc.govt.nz)  
Website: [www.wdc.govt.nz](http://www.wdc.govt.nz)  
Ruakaka Service Centre  
Takutai Place, Ruakaka 0116  
Phone: (09) 432 8360

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## Trade Waste Information

for the Food Preparation/  
Processing Industry



## Grease Traps

During the preparation, cooking and processing of food, a significant amount of Fats, Oils and Grease (FOGs) is generated as a result of washing associated utensils/crockery. If uncontrolled this can result in blocked sewer lines. As such a grease trap needs to be installed as a way of pre-treating the waste prior to discharge to a wastewater treatment system, whether this be the Council sewer line or a private system (e.g. septic tank).

There are three basic categories of trap design:

**Gravity** – relies on the FOGs separating from the water by floating. Also referred to as a 'Passive' trap.

**Mechanical** – relies on machinery to actively remove the FOGs from the water.

**Converter** – relies on dosing the unit with biological solutions that encourage the breakdown or digestion of the FOGs into inert substances. Often used in conjunction with gravity traps.

Traps are designed and sized relative to the daily load they need to treat. With large businesses more than one grease trap may be required. Your local hygiene specialist will be able to assist you in selecting the right system. The Building Code G13 – Foul Water also provides details of minimum sizing requirements.

It is also important to remember that if the size or nature of your

activity changes, such changes must take into account the impact on the existing grease trap, e.g. upgrading may be necessary.

Regardless of the type of trap used, they all operate on the same basic principle known as "The Three T's" (Time, Temperature & Turbulence) to encourage the FOGs to separate from the rest of the wastewater.

**Time** – to hold the waste in the trap for long enough that separation can occur

**Temperature** – to cool the waste down to encourage coagulation of 'thicker' fats & grease. The only exception is with mechanical traps which use heaters to maintain the FOGs in a 'sticky' state.

**Turbulence** – to slow down the rate of flow to allow separation to take place

Whichever type of trap is used, the simplest way to ensure that it operates efficiently and extend the period between clean-outs is to reduce the amount of solids entering it. This can be achieved by;

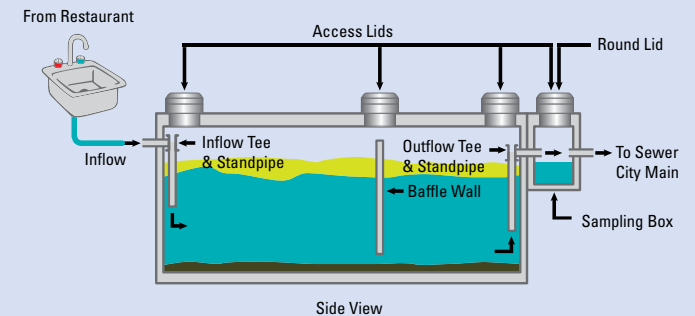
- wiping all scraps into the bin
- the use of sink strainers to capture solids
- dispose of used fats and oils with suitable recycling firm.

Remember FOGs float - any solids in the bottom mean less room for FOGs to collect and more frequent clean-outs. Also, while not very common, please be aware that the use of sink macerators

or grinders in commercial kitchens is prohibited under the Trade Waste Bylaw 2008.

A word of caution. There is a wide variety of cleaning products available, some of which are required under food safety standards. However the overuse of things like heavy-duty degreasers and corrosive (caustic) agents can result in a very clean trap, but blockages still occur. This is because the FOGs can bypass the trap itself, accumulating further down the line.

These products may even be used to deal with a minor blockage or slow-draining sinks. Such problems are likely to be symptoms of an overloaded or poorly maintained grease trap.



## Maintenance

Regardless of the size or design, all traps must be maintained on a regular basis appropriate to the level of use to ensure that they are working properly. Such maintenance must be carried out by a contractor certified under the WasteMINZ Liquid & Hazardous Wastes Code of Practice. Look for the certification logo on vehicles and correspondence;



A poorly maintained trap can result in blockages, either upstream of the trap or downstream. A cleaning frequency of 1-3 months is often acceptable, however the trap size (volume) and the load placed on the trap all vary from business to business, variations which will result in different cleaning intervals for each trap.

We would highlight that Council no longer permits servicing of these to be done by the business itself, instead they must be serviced by a contractor to a standard that meets the manufacturers specifications, e.g. a hygiene consultant or vacuum truck contractor.

The best practice method that all contractors should follow for cleaning any trap is:

1. remove the top layer of FOGs first
2. then solids at the bottom
3. followed by all the remaining liquid
4. the sides of the empty trap should also be cleaned/scraped down to remove any remaining build-up; if waterblasted, this liquid should also be removed.
5. The trap should then be refilled with cold water.

These steps will make sure that the trap works at top efficiency from the very start. They can even reduce the number of cleanouts needed.

It is important to note that what is trying to be achieved is cleaning of the trap. Simply emptying it of the contents will result in a poorly operating trap that will need more frequent servicing to meet any discharge limits set out in the WDC Bylaw, as well as increasing the chances of a blockage occurring. Also, a trap is not like a septic tank where it's acceptable to leave some material in the bottom. Traps should be completely emptied each time.

It is also important to remember to have your trap emptied if your business is vacating the food premise. Similarly, if you are looking to occupy a new premise, make sure that the trap has been cleaned. A grease trap is no different to a rubbish bin in the yard – no-one would expect it to be full.

## Waste Grease

Any waste grease to be stored on site prior to disposal needs to be kept in sealed containers. Any minor spillages during the transfer of waste grease to these containers must be cleaned up immediately to prevent it from becoming a health risk and environmental pollutant. Disposal of this waste should also be made through an appropriate, responsible contractor (e.g. certified under the WasteMINZ Liquid & Hazardous Waste Code of Practice).

Similarly, waste containers should not be stored beside waterways or stormwater grates. Lids should be tightly closed at all times. This is to avoid any sudden or long-term spills/leaks from polluting our community's waterways.

We would also ask businesses to be mindful of the build-up of grease within external extraction ducts, as this is not only a risk to public health & of pollution of the environment, but more importantly it can present a major fire risk. Evidence of this around the outside joins on blackened areas on the ground or roof beneath the ducting.

For further information on Trade Wastes in the Whangarei District or an application for a Trade Waste Consent, please see our website [www.wdc.govt.nz](http://www.wdc.govt.nz).