

CARLOW COUNTY COUNCIL

Guidance Note on Grease Management

1. BACKGROUND

“Grease” refers to fats and oils found in wastewater. It is commonly referred to as FOG (Fats, Oils and Greases). It is generated in huge quantities in food businesses and originates from butter, lard, vegetable fats, oils, meats, nuts and cereals.

2. WHY IS GREASE SUCH A PROBLEM?

The main reason why grease causes problems is because it doesn't break down easily and solidifies with lower temperatures. The main problems associated with grease entering the sewerage system are accumulation on pipes and equipment, blockages and increases in the time and money required to treat the waste at the wastewater treatment plant.

3. THE GREASE TRAP OR INTERCEPTOR

Due to the problems, which can be created by grease entering the sewer system all food businesses must install and maintain grease traps to prevent the grease entering the sewer system. These businesses include restaurants, canteens, caterers and other commercial cooking facilities. The main aim of the grease trap is to separate the grease from the rest of the wastewater. The grease then rises to the top of the trap and is stored. The below diagram (Fig 1) shows the layout of a typical grease trap.

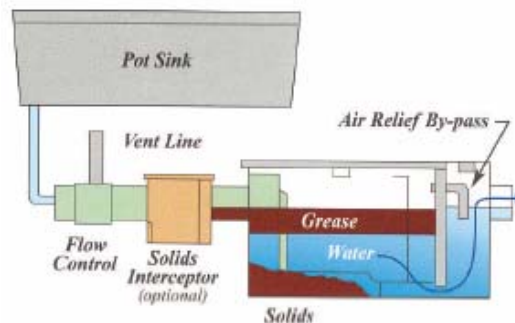


Figure 1: A typical grease trap layout

There are generally two types of grease trap acceptable, these are:

1. Traps located in an establishment near the fixture it serves.
2. Large traps located outside the building in the ground that serve the entire kitchen.

4. WHAT FIXTURES REQUIRE A GREASE TRAP?

1. Pot sinks
2. Rinse sinks
3. Any sinks, fixtures or drains through which a significant amount of oil, fat or grease may be introduced.
4. Soup kettles or similar devices
5. Dishwashers

5. GREASE TRAP DESIGN

Not all grease traps work equally well. **Carlow County Council require all grease traps installed to confirm to the Irish Standard EN 1825 Grease separators –Part 1 (Principals of Design, Performance, Testing, Marketing and quality control) and I.S. EN 1825 Grease Separators –part II (Selection of Nominal Size, Installation, operation and Maintenance) published by the National Standards Authority of Ireland.**

Grease traps that use an additive (e.g. bacteria, chemicals or enzymes etc) to dissolve the collected grease are **not acceptable** and do not comply with the above standard. They operate by breaking down the grease without removing it. The grease will reform further down the sewer network and cause problems.

6. GREASE TRAP INSTALLATION

Unless installed correctly your grease trap may not work effectively. The main point to remember is “ install the grease trap as close as possible to the source of the grease laden water”. The main reason for this is to avoid blockages in long pipes but also because the grease separates more easily when hot.

Consider the following points:

1. Select a suitable location. The location should be such that the wastes entering the trap should have cooled to 45° before entering the trap. The recommended distance from the source to the grease trap should be 4 meters minimum.
2. The grease trap must be upstream of foul waste entering the system.
3. The hole for the grease trap should have an extra 200mm space on all sides.
4. The base should be constructed of 20N concrete and be 200mm in depth.
5. Ensure correct alignment of the grease trap with the inlet and outlet pipes.
6. Fill the grease trap with water and backfill areas around the grease trap with concrete or gravel.
7. The top slab should be such as to withstand any loads applied to it.

7. MAINTAINING YOUR GREASE TRAP

It is vital that your grease trap is cleaned on a regular basis to ensure it stays in good working order and also to prevent odours. In general grease traps should be cleaned when 25% of the liquid level or the trap is grease or oil. It is important that grease is removed from the top of the chamber but also from the bottom where solids may have settled. Frequency of cleaning will depend on the nature of the activity producing the grease i.e. a trap used to receive grease from a utensil washing process will need much less cleaning than one used to receive grease from a full service restaurant.

Generally the following applies:

- Clean under sink units every 2-3 days
- In ground interceptors must be cleaned every 30 days.

There are independent contractors available who specialise in grease trap cleaning, these will clean the trap and then take away the grease for appropriate treatment. We recommend that you engage the services of a specialist-cleaning contractor who agrees to a contract of cleaning. If you perform the cleaning yourself then you must ensure correct and proper disposal of the waste oils, fats and greases.

8. MANAGING YOUR GREASE

The first step in any management plan is prevention.

Prevention of grease:

- Control the grease at its source, minimise, reduce or eliminate sources of grease if you can.
- Change the nature of processes i.e. use a process which results in the production of smaller quantities of fats, oils and greases.
- If food grinders are installed then remove them as they contribute to the formation of large quantities of grease.

Managing your grease waste, consider the following:

1. Recycle your used oils and grease with the following companies. This list is not meant to be all-inclusive, but it lists only firms that have come to the attention of Carlow County Council. The Council makes no recommendations whatsoever regarding private firms performing fats, oils, and grease (F.O.G.) recycling.
 - Frylite (Dublin) Ltd
Unit J1
Ballymount Industrial Estate
Ballymount Drive
Dublin 12
Telephone: 01 4569511
Email: info@frylite.com
 - Sita Environmental
Unit 402
Greenogue Business Park
Rathcoole Co Dublin
Tel: (1850) 203030
 - O' Toole Composting
Ballinrane,
Fenagh,
Co. Carlow
Tel: (059) 9148984
 - Atlas Oil Laboratories Limited
Clonminam Industrial Estate,
 - Portlaoise, Co. Laois.
Telephone: 057 8678600
Fax: 057 8678699
 - Waddock Composting facility
Ltd,
Killamaster,
Co. Carlow
Tel: (059) 9163596
 - Super Drain Ltd,
112 Elm Road,
Western Industrial Estate,
Naas Road,
Dublin 12
Tel: (01) 4097070
Fax: (01) 4569293
2. Post up no grease signs. These will remind staff not to pour grease down the drains. Adding hot water, detergent or even commercial degreasers does not liquefy the grease long enough to escape your drains.
3. Use your bin to dispose of food scraps instead of putting them down the drain. This reduces the amount of grease that will be present in the grease trap.
4. Develop a grease trap maintenance programme.
 - Develop an inventory of all grease traps and ensure that fixtures have the proper size and type of traps.

- Establish a cleaning schedule if you clean the trap yourself. This should include details of who cleans, when it needs to be cleaned and when it was cleaned last. If you have a specialist-cleaning contractor then you should obtain formal certification from the specialist to certify that cleaning was carried out.
- Inspect your grease traps on a regular basis to check the grease level, their condition and any other observations. These inspections should be recorded.
- Train all staff on grease management and trap cleaning.
- **Never** add bleach, enzymes or emulsifiers or any other chemical agent to the grease trap in an attempt to digest the grease.

Local laboratories:

This list is not meant to be all-inclusive, but it lists only firms that have come to the attention of Carlow County Council.

Tel Lab
Tullow Industrial Estate,
Tullow,
Co. Carlow
Tel: (059) 9152881

Independent Analytical Supplies
Kilcarrig Street,
Bagenalstown,
Co. Carlow
Tel : (059) 9121022

If you have any further queries please contact:

Carlow County Council
Environment Department
Tel: (059) 9136230

