

Grease Trap Maintenance guide

Below is a quick guide to maintaining your grease trap. If you still have a concern with your grease trap after following all of the suggestions in this guide, the NPWS Senior Environmental Health Officer may be able to assist with further advice.

How to maintain your grease trap:

1. Have a good hard look at the structure and check:

- a. Does the lid fit and close firmly – leaving NO gaps for insects or small mammals to squeeze through – they can slip through VERY small gaps and slots so check thoroughly.
- b. Are there any cracks or chips in the lid or on the walls of the grease trap? Concrete grease traps are especially prone to developing cracks or big chips in the lids.
- c. Are the internal walls corroded? Especially concrete traps. If so its time to resurface the walls or replace the trap.
- d. Are all the baffles in place? The number of baffles will depend upon the design. Smaller grease traps often have 3 baffle plates but inspection often reveals one or more missing. If the trap was designed for 3 baffles it needs three baffles to do its job effectively.

2. Have a look around the grease trap.

- a. Rodent habitat
It is surprising how many times a good look will reveal a small entrance to the home of a small mammal. Grease traps make a good shelter for rodents with a food source very close by.
- b. Pipework entry to the building
The plumbing fittings draining to the grease trap often provide entry to the building for rodents.
- c. Out of Level grease traps
Many grease traps are undermined by rodents digging out underneath. The undermining of the foundations can result in the grease trap moving out of level. Out of level grease traps are a MAJOR problem because:
 - i. They cause the grease trap to short circuit past the baffles which permits the grease and oil laden wastewater to pass into the drainage system.
 - ii. Drains become blocked or obstructed.
 - iii. Tradesmen may be required to repair drains and to straighten the grease trap.
 - iv. They overflow causing:
 1. mess;
 2. odour;
 3. food for pests and vermin;
 4. OH&S issue
 5. Potential cross contamination between wastewater and food; and
 6. The potential spread of disease.

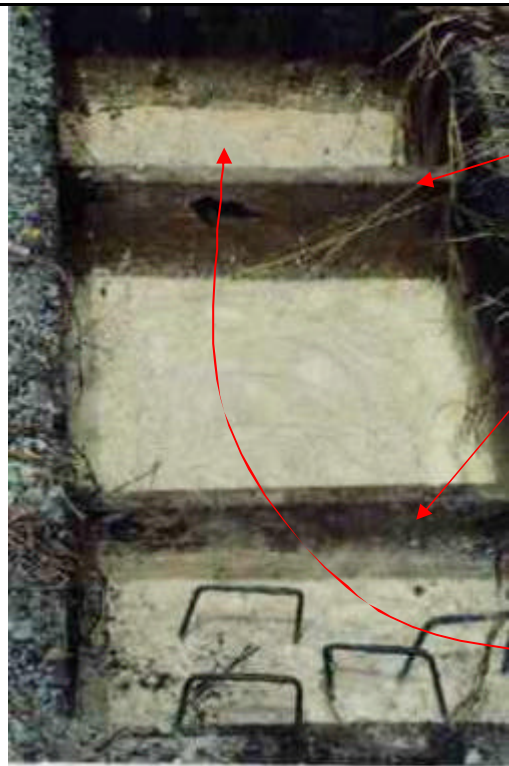
3. Have a look at the deposit of grease inside.

Probe the top of the grease with a stick or shovel. Is it thick? Perhaps it is time to have it pumped out before the grease layer builds up and blocks the drain?

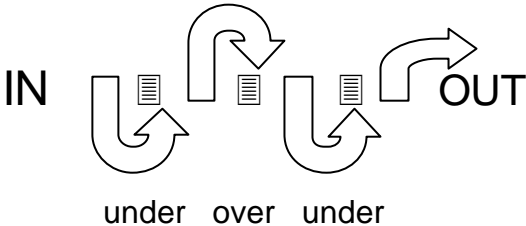
Remember: all grease traps smell offensive when the top is disturbed. When the lid is down the smell should not be overly offensive. If it is offensive or strong then it is probably time to have it pumped out OR there may be a break in the integrity of the grease trap structure OR a plumbing fitting may be cracked or broken.

4. Regular Inspection saves money, smell, mess and embarrassment

The trap should be inspected for all of the above parameters AT LEAST once a month (if they are not under lots of snow) if in a busy premise. Make sure you keep a record of your inspections.



Pictured left is a domestic grease trap. Note the two plates. There is a third plate between these two plates. The middle plate comes up off the bottom of the grease trap but is not meant to be visible from the surface. The wastewater flows through the trap in an in/ under /over /under /out sequence

IN  OUT
under over under

If any of the three plates are missing then the grease traps efficiency is significantly diminished.

This grease trap is overdue for cleaning as the third compartment contains heavily grease laden wastewater. The grease has probably already started to flow into the wastewater drain. This may result in a blocked drain. Blocked waste drains can be expensive to clear. This will also put greater stress on the Sewage Treatment Plant.

Inflow

REMEMBER: Safety First. Some of the grease trap lids are heavy so be careful. It is also important to never enter a pit as it is a confined slippery space and you may have difficulties getting out.

MAINTENANCE AND CLEANING OF GREASE ARRESTORS – PUB 23



What is a Grease Arrester / Grease Trap?

A grease arrester or grease trap is normally a rectangular tank or pit with a baffle at the inlet end and a T-square outlet (see Figure 1). This is the most commonly used industrial waste water pre-treatment device in food preparation processes.

It is designed to collect grease and oily wastes by flotation and coagulation and to settle solid material as sludge, preventing these materials from discharging into the sewer system and causing blockages.

The effectiveness of a grease arrester is dependent on good housekeeping practices and frequent clean-out and maintenance.

A typical grease arrester design is shown in Figure 1. The full design drawing for a typical grease arrester can be downloaded from our website.

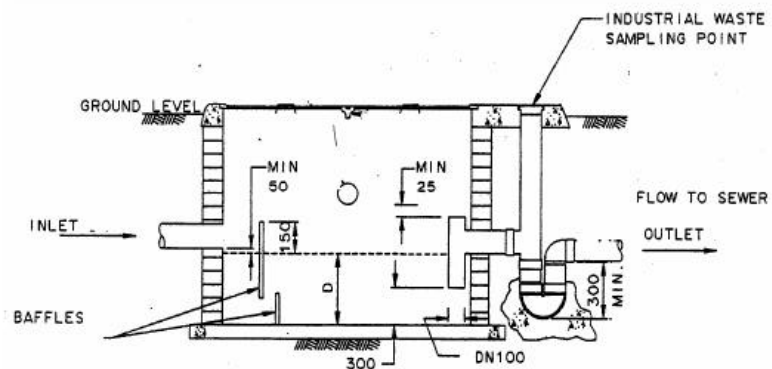


Figure 1: Longitudinal Cross-Section of a Grease Arrester

The water level during normal operation is in line with the bottom of the outlet pipe (the dotted line in Figure 1).

The pictures to the left are of a grease arrester that has been pumped out, and is yet to be refilled.

Courtesy of Water Corporation

<http://water.com.au/files/publicationsregister/3/IWPUB23.pdf>

Another good reference document for grease traps is John Tesoriero's *Liquid Trade Installation: a comprehensive guide* ISBN 0-9587003-6-2.