



## 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.

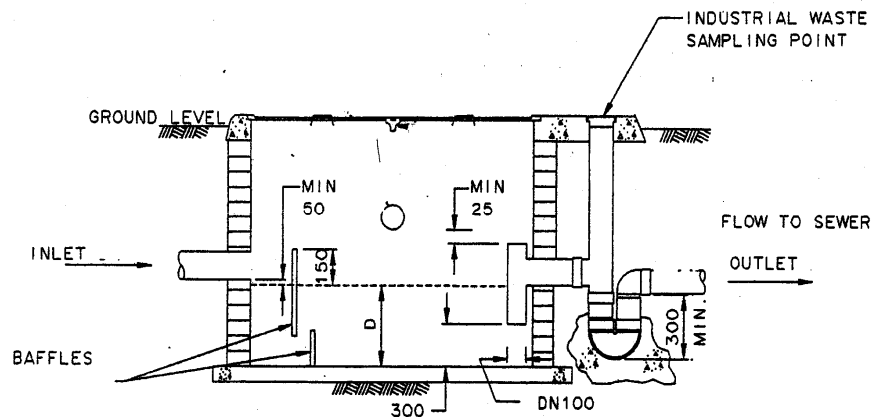


Figure 1: Longitudinal Cross-Section of a Grease Arrester

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. 3

## **Maintenance**

### **Pump-Out**

Of course, your grease arrestor is not a bottomless pit, and the grease and sludge captured by it must be pumped out regularly to ensure it keeps working effectively. Proper maintenance of the grease arrestor, including regular pump-out, is your responsibility, and is a condition of your Industrial Waste Permit.

A grease arrestor requires pumping when one of the following conditions exists:

- The total amount of floating and settled solids exceeds 30% of the effective depth of the grease arrestor.
- The effluent quality exceeds the Corporation's acceptance criteria for oil & grease or suspended solids on two consecutive grab samples taken 24hrs apart or a representative flow proportional composite sample.
- There are gross solids or oil and grease visible in the industrial waste sample point down stream of the grease arrestor.

Pump-out of grease arrestors, and disposal of the captured sludge – although a pre-condition of the Industrial Waste service - is not provided as part of the service. You need to make separate arrangements for grease arrestor pump-out through a licensed waste cartage contractor. The contractor will charge you for their services to clean out the grease arrestor and transport the waste to an appropriate waste treatment and disposal facility. They may also on-charge the costs of final treatment and disposal of this sludge. Alternatively, treatment and disposal costs may be invoiced separately by the treatment facility operator.

### **Pump-Out Frequency**

The frequency of cleaning the grease arrestor and pumping out grease and sludge is set by the Corporation and typically depends on the type and size of grease arrestor, and the nature and volume of the wastewater produced by your operation.

The pump-out frequency of new connections is determined when we assess your application to discharge industrial waste.

You must adhere to the pump-out frequency nominated for your grease arrestor. If you do not have a frequency set, or if the volume or nature of your wastewater changes as your business evolves, then you must contact the Water Corporation's Industrial Waste Section to request a re-assessment.

### **Pump-Out Re-Assessment**

You may request the Water Corporation to undertake a re-assessment of your grease arrestor pump-out frequency. This will involve a series of inspections to determine the point at which the grease arrestor is deemed to have failed by discharging wastewater that exceeds the Corporation's acceptance criteria. The Corporation will charge a service fee to undertake a re-assessment.

### **General Maintenance**

To assist the waste cartage contractor, the area on and around the grease arrestor is to be kept clean and tidy. Access must be maintained at all times for both your cartage contractor and Water Corporation personnel.

Covers are to be regularly checked for damage or deterioration and where applicable must be greased at least once a year to ensure a gas tight seal is maintained between the covers and the frame. The covers must sit flush with the frame.

## **Cleaning**

Remove covers and completely pump out the grease arrestor using a suction hose. Scrape the internal walls to remove debris and inspect for any deterioration. Hose down the internal areas of the grease arrestor and using the suction hose remove the residue. Fill the arrestor with water to its operational level and replace the covers.

NOTE: It is the responsibility of the Industrial Waste Permit holder to ensure that a hose tap with backflow prevention is available adjacent to the grease arrestor.

## **Record Keeping**

It is the responsibility of the owner or operator of the grease arrestor to maintain records of all inspections, maintenance and pump-outs. Water Corporation personnel may inspect these records from time to time.

## **Enzyme/Biological Products**

These products are being marketed as additives to grease arrestors and are claimed to reduce pump-out frequency.

These products are not permitted for use without prior approval by the Water Corporation. Any requests to use such products should be referred to the Water Corporation's Industrial Waste Section.

## **More Information?**

You can find more information about the Industrial Waste service on our website at [http://www.watercorporation.com.au/industrialwaste\\_index.cfm](http://www.watercorporation.com.au/industrialwaste_index.cfm)

Or if you prefer, please call us on 13 13 95.