



# Fats, Oils and Grease Management (FOGMan)

Liquid Waste Carrier  
Code of Practice



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## Background

Greasy wastes such as fats, oils and greases are discharged into the Water Corporation's (**Corporation**) wastewater collection system from more than 5,000 customers across the state. By-law 28 of the *Metropolitan Water Supply, Sewerage and Drainage By-laws 1981* and By-law 36 of the *Country Towns Sewerage By-laws 1952* (**By-laws**) require the installation of pre-treatment fixtures such as grease arrestors to protect the wastewater system from incompatible materials that can cause formation of odorous and toxic gases, blockages, flooding, corrosion, excessive loading of the system and potential negative impacts on wastewater re-use. The By-laws require the pre-treatment apparatus to be serviced and maintained in accordance with the requirements set out by the Corporation.

The unmanaged monitoring of grease arrestor maintenance has resulted in an increase in the number of customers failing to service their grease arrestor completely or failing to service it at the required frequency. The failure to perform the maintenance required has resulted in a major increase in the number of wastewater system blockages and potential overflows into the environment.

The implementation of the Fats, Oil, Grease Management (FOGMan) program and partnership with the liquid waste industry will enable the systematic management of greasy waste discharges into the Water Corporation's wastewater system leading to improvements in assets operation and maintenance. This program will also result in greater volumes of greasy waste being removed and transported to other disposal and treatment sites.

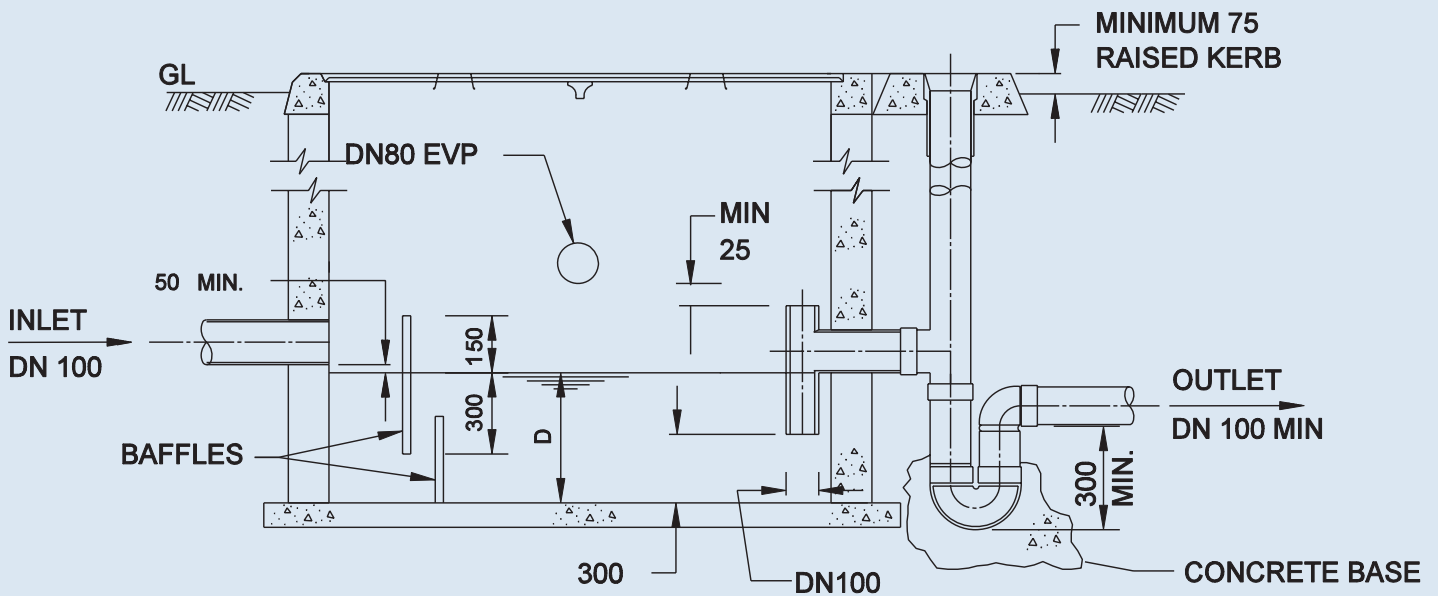
This Code of Practice describes the obligations and minimum standards of service for Liquid Waste Carriers (**Carrier**) and Drivers to take part in the Corporation's FOGMan program.

## Design

A grease arrestor 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 wastewater 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 arrestor is dependent on good housekeeping practices and frequent clean-out and maintenance.

A typical grease arrestor design is shown in Figure 1. The full design drawing for a typical grease arrestor can be downloaded from [http://www.watercorporation/industrialwaste\\_index.cfm](http://www.watercorporation/industrialwaste_index.cfm)

**Figure 1** - Typical Grease Arrestor Design



## Maintenance

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 (see Appendix 2). The determined frequency is set in weeks and is a condition of the Industrial Waste Permit for the customer to discharge their waste to sewer.

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 and grease or suspended solids on two consecutive grab samples taken 24 hours apart or a representative flow proportional composite sample; or
- There are gross solids or oil and grease visible in the industrial waste sample point down stream of the grease arrestor.

The Corporation expects the customer's grease arrestor to be serviced in accordance with the specified frequency set out in the Industrial Waste Permit. However, the Corporation recognises that carriers can be affected by other business-related functions, which can impact on their ability to service the grease arrestor on the specified date. The following are service frequency tolerances that are acceptable to the Corporation;

Grease Arrestor Service Frequency (weeks)	Acceptable Tolerances (weeks)
2	1
4	1
6	1
8	1
10	2
12	2
14	2
16	2
other	By individual Agreement

The Corporation can be requested by the customer to undertake a re-assessment of grease arrestor pump-out frequency. This involves 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 the customer a service fee to undertake a re-assessment. If the servicing frequency does change, the Corporation will notify the carrier of this change to enable their schedule to be adjusted accordingly.

## Cleaning

The Driver must follow the cleaning process below to correctly clean a grease arrestor:

- Remove all covers and completely empty each section of the trap using a suction hose;
- Scrape the internal walls of the trap to remove debris;
- Hose down internal areas of the grease trap (when a water supply is available) and use the suction hose to remove residue;
- Securely replace all covers; and
- Report any structural damage or customer refusal to clean the arrestor.

## Notification of Cleaning

The Carrier, after obtaining the consent of the customer, must notify the Corporation of the cleaning of a grease arrester within 7 days of the clearance date. The notification must be in the form of the technical specifications shown in Appendix I and can be provided to the Corporation in the following formats:

- CSV data file;
- Excel template file (template available from the Water Corporation); or
- Facsimile template (template available from the Water Corporation).

All electronic notifications should be sent to **fogman@watercorporation.com.au**.

Facsimile notifications should be sent to 9420-3464. Technical specifications for the CSV data file are available on request from the Water Corporation.

**Customers who choose not to use a Carrier that complies with the Code of Practice are required to submit a copy of a clearance record within 7 days of the clearance.**

## Carrier and Water Corporation Agreement

Carriers have the option of entering into a formal Agreement with the Water Corporation to comply with the Code of Practice. This Agreement will enable the Carrier to have their name and contact details added to the Water Corporation's Carrier contact list. This Carrier list will be provided to the Water Corporation's commercial and industrial customers with grease arrestors when;

- There is a change in entity of the customer;
- The Corporation issues a new Permit to a customer; or
- A customer requests the business contact detail of a Carrier that abides by the Code of Practice.

Customers will continue to have the option of using any Department of Environment and Conservation-licensed contractor, but will have to source their details individually.

## Non-Compliance with Code of Practice

Where the Corporation becomes aware that a Carrier has failed to comply with the terms and conditions of the Code of Practice, it will notify the Carrier of the failure and may subsequently:

- Remove the carrier from the customer list; and
- Advise its customers that the Carrier no longer complies with the Code of Practice

A Carrier may re-apply to be part of the FOGMan system after 6 months. The re-application must be made through the approved application process and it must include detailed reasons for their previous non-compliance and steps taken to ensure future compliance.

## Updates of the Code of Practice

This Code of Practice may be updated from time-to-time. The most recent version of this Code of Practice and the formal Carrier agreement will be available on the Water Corporation website [http://www.watercorporation//industrialwaste\\_index.cfm](http://www.watercorporation//industrialwaste_index.cfm)

Any queries in regard to this Code of Practice should be directed to the Corporation's Commercial and Industrial Services section on (08) 9420 2115.

## Appendix I – Technical Specifications for Clearance Notifications

	Field	Data Type	Length	Mandatory	Description
1	Liquid Waste Contractor (LWC) Identifier	ASCII String	4 characters	Y	Special code assigned to the LWC or property owner by Water Corporation. If you do <b>NOT</b> have a code please contact the Water Corporation on (08) 9420-2115.
2	Barcode Number	Decimal Integer	6 digits	Y	Unique identifier of the Grease Trap from the Water Corporation barcode label attached to the fixture. Format: 6 full digits (inc. leading zeros). Examples: 1. 000081 2. 079996
3	Clearance Date	Date	8 characters	Y	Date on which the Grease Trap was cleared. Format: ddmmyyyy (inc. leading zeros) Example: 1. 02102006 (for 2nd October 2006)
4	Operational Comments	ASCII String	0= L <= 64	N	A code identifying the operational status of the Grease Trap. Z = Unsewered area T = Sewered area – Barcode missing/damaged L = Lid Maintenance M = Baffles Broken O = Outlet/Inlet Broken D = Structural Damage G = Disconnecter gully damaged/broken F = Grease Arrestor filter damaged/blocked/missing N = No physical access to service the grease arrestor eg gates locked R = Refused by customer W = Water Corporation suspended service
5	Business Status	ASCII String	1= L <= 64	Y	A code or identifier identifying the business status for the service. A = Active ( business operating as normal) S = Service suspended by LWC B = Service suspended by LWC due to customer bad debt H = Business shutdown/closed temporarily
6	Clearance Volume	Integer	Up to 6 digits	N	Volume of waste pumped in litres. Examples: 1. 2000 2. 999999
7	Pre-Treatment Type	ASCII String	Up to 15 characters	N	Type of pre-treatment to be serviced by the 0 = Grease Arrestor 1 = VGS 2 = Solids Trap
8	LWC Own Reference	ASCII String	0 <= L <= 64	Y	To enable the LWC (or property owner) to locate original documents and system records if there is any data correction required. Used by Water Corporation when contacting the LWC.

### File Format

The Clearance Data File can be provided in one of two formats.

1. Comma delimited data file.
2. Excel data file.



## Clearance Report Information

	Field	Mandatory	Description
1	Liquid Waste Carrier Name	N	Trading Name of the Liquid Waste Carrier.
2	Water Corporation ID	Y	Special code assigned to the LWC or property owner by Water Corporation If you do <b>NOT</b> have a code please contact the Water Corporation on (08) 9420 2115.
3	Barcode Number	Y	A 6 digit number used to uniquely identify a customer's grease arrestor. The bar code label will be attached to or located near the fixture.
4	Business Name	N	The name of the business which had their grease arrestor cleared.
5	Clearance Date	Y	Date on which the grease arrestor was cleared. Format must be: dd/mm/yyyy (must include leading zeros).
6	Operational Comments	N	A code identifying the operational status of the Grease arrestor. Z = Unsewered Area T = Sewered area – Barcode missing/damaged L = Lid Maintenance M = Baffles Broken O = Outlet/Inlet Broken D = Structural Damage G = Disconnecter gully damaged/broken F = Grease Arrestor filter damaged/blocked/missing N = No physical access to service the grease arrestor eg gates locked R = Refused by customer W = Water Corporation suspended service
7	Business Status	Y	A code or identifier identifying the business status for the service. A = Active (business operating as normal) S = Service suspended by LWC B = Service suspended by LWC due to customer bad debt H = Business shutdown/closed temporarily
8	Clearance	N	Volume of waste pumped in litres.
9	Pre-treatment Type	N	A code identifying the type of grease arrestor or pre-treatment 0 = Grease Arrestor 1 = Vertical Gravity Separator (VGS) 2 = Solids Trap
10	Liquid Waste Carrier Own Reference	Y	To enable the LWC (or property owner) to locate original documents and system records if there is any data correction required. Free format ASCII string. Used by Water Corporation when contacting the LWC.

## Appendix 2 – Typical Grease Arrestor Service Frequency Table

Typical Grease Arrestor (GA) Service Frequency Table						
Business Category	Business Type	Grease Arrestor Size (L)				W E E K L Y  S E R V I C E  F R E Q U E N C Y
		<540	540 – 1000	1001 – 1500	1501 – 2500	
<b>Plated Meals</b>	<ul style="list-style-type: none"> <li>• Restaurants (&gt; 20 seats)</li> <li>• Cafes (&gt; 20 seats)</li> <li>• Food Halls</li> </ul>	4	6	8	8	
<b>Plated Meals</b>	<ul style="list-style-type: none"> <li>• Taverns/Hotels</li> <li>• Function Centres</li> <li>• Hospitals</li> <li>• Aged Care Facilities</li> <li>• Food Manufacturing</li> </ul>	2	4	6	8	
<b>Take-Away Food</b>	<ul style="list-style-type: none"> <li>• Lunch Bars</li> <li>• Fish &amp; Chips</li> <li>• Hamburgers</li> <li>• Delicatessen</li> <li>• Supermarkets</li> <li>• Butchers</li> <li>• Bakers</li> <li>• Restaurants (&lt; 21 seats)</li> <li>• Cafes (&lt; 21 seats)</li> </ul>	6	8	10	16	
	Quick Service Restaurant	2	4	4	6	
Shared Grease Arrestors – See Note 5					1/03/2008	

### Notes

1. This table assumes that the Grease Arrestor (GA) is appropriately sized. See note 10.
2. Plated Meals category includes all premises in which food is provided to patrons for consumption on the premises in a plated form.
3. Take-away Food category includes all premises in which food is provided to patrons in a take-away form.
4. QSR (Quick Service Restaurant) – Fast Food Chains.
5. Shared GA frequency should be based on the business type with the most frequent service schedule.
6. Customers which have a GA which is deemed by the Corporation to not be required, have the option of removing or bridging the GA, or the maximum default frequency of 16 weeks will be applied.
7. These service frequencies will also apply to GAs incorporating the use of filters or other non-conventional designs unless specifically approved otherwise by the Corporation. Filters should be serviced at the same time as the GA.
8. GAs greater than 2500L in capacity are to be individually assessed to determine the service frequency.
9. GAs in series are assumed for the purpose of determining a service frequency to be the sum of both capacities. eg. 1 x 2000 L + 1 x 2000 L = 4000 L GA.
10. This chart is not to be used to determine GA sizing, see Sizing Of Grease Arrestors For The Retail Food Industry – PUB23C.
11. This table is uncontrolled at time of printing. For the most up-to-date version please contact the Water Corporation.