



## Plumbing for retail food businesses

Every day, thousands of food outlets in Sydney produce waste such as cooking oil, grease and food solids. If discharged directly into our wastewater system, this waste can block pipes or overload wastewater treatment plants. This causes waste to overflow into the environment, causing pollution problems in our rivers and on our beaches.

**Correctly installing and maintaining plumbing, grease traps and other devices will help you effectively manage and dispose of greasy wastewater from your retail food business.**

### Approval for connection

You must seek written approval from Sydney Water before operating your retail food business. We may need to inspect the property before we can give this approval.

Please apply through [Sydney Water Tap in](#)<sup>®</sup> to 'discharge trade wastewater'.

All commercial kitchens and food preparation areas must have authorised in-sink and in-floor waste bucket traps in all prep sinks and floor wastes. Most retail food businesses also need to install a **grease trap**.

The licensed plumber carrying out these works must arrange a plumbing and drainage inspection with Fair Trading NSW. Plumbers must provide:

- an updated sewer service diagram to the Fair Trading NSW.
- a Certificate of Compliance to you (as the retail business applicant) and the Fair Trading NSW for the completed work.

If you own a business, engage a licensed plumber to install your grease traps and make sure they give you a Certificate of Compliance for the finished work.

### Grease trap requirements

Where a grease trap is required, all wastewater from food preparation areas including floor wastes, kitchen sinks, dishwashers and garbage areas should drain to it.

The grease traps should be as close to the source of grease as possible, so pipes between the kitchen and the grease trap don't clog with grease. If you can't avoid long pipe runs, such as in shopping centres, you can use a heat trace or increase the grade.

Grease traps must be at least 1,000 litres, because this is the minimum size to capture grease efficiently. The maximum size is 5,000 litres to ensure ease of pump-outs and clean-outs.



If you cook or serve hot food, you must have a grease trap and a trade waste agreement with Sydney Water.

Kitchen wastewater should drain by gravity to the grease trap and then by gravity to our wastewater system (sewer). If this isn't possible, kitchen wastewater can drain to an under-sink pump unit or to a pump well outside the kitchen. You can also configure a grease trap to drain to a pump well and pump wastewater to the wastewater system from there. You must be able to access any pump well or pump unit for maintenance.

The plumber must connect a pumped line into the inlet to the grease trap above the inlet, laying at least the last metre horizontally. Don't install a pumped system just for convenience. It's more difficult and expensive to manage and maintain. When you apply to us for approval, we'll ask why the wastewater can't drain to the grease trap by gravity if you propose to install a pumped system. Don't direct wastewater from potato peeling machines to a grease trap, as it contains starch rather than grease.

We only permit authorised grease traps. Please refer to authorised [listed pre-treatment for food businesses](#) on our website.

## Venting grease traps

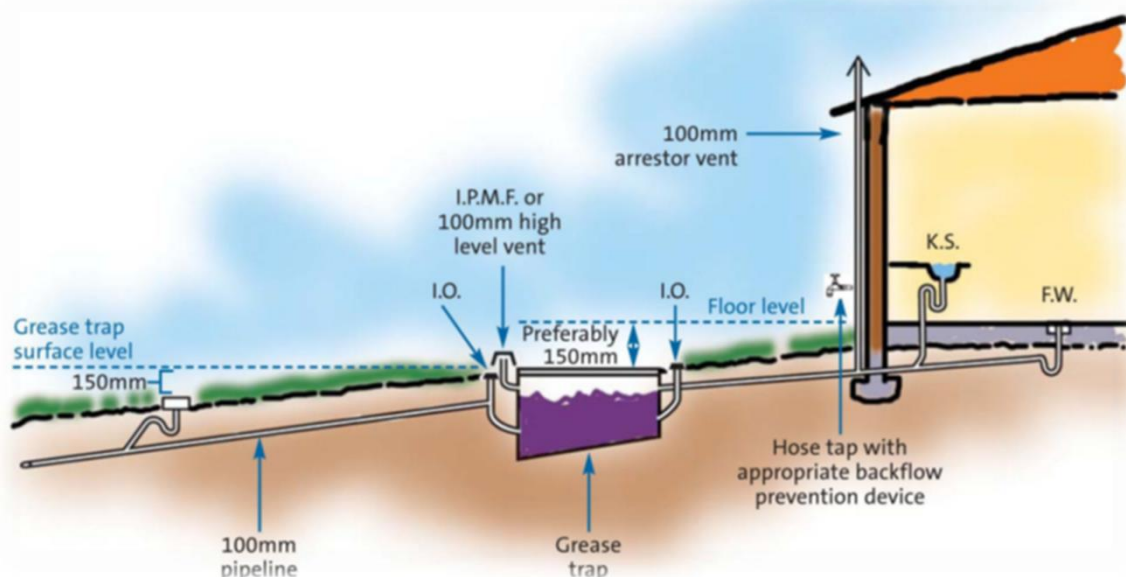
You must vent the grease trap. Venting pipework must be at least 100 mm diameter. All grease trap installations must have:

- two 100 mm vents open to the atmosphere for cross-ventilation
- an induct vent, either high or low level directly off the grease arrestor complying with the *Plumbing Code of Australia*
- a high level educt vent off the incoming drainage.

Use of air admittance valves to vent grease traps is **not permitted**, but air admittance valves on branch lines and 'over distance' branch lines draining to grease traps are permitted if installed following the *Plumbing Code of Australia*.

## Inlet and outlet pipework

Inlet and outlet pipework for grease traps is not part of pre-treatment and does not come under our jurisdiction. It's covered by plumbing and drainage codes and standards and inspected by the NSW Department of Fair Trading.



## Maintaining grease traps

The space above the grease trap must be **a minimum of one metre unobstructed clearance**. This allows enough access space to monitor the grease trap, remove the grease trap lip, maintain it and have it serviced. Keep the area clear of any obstructions which may block access to the grease trap.

### Safe access for grease trap waste inspection and maintenance

All above-ground grease traps higher than 1.2 metres need a platform and steps manufactured to *Australian Standard 1657-1992* for safe access for inspection and maintenance.

Grease trap contractors must be able to park their vehicles as close as possible to the grease trap to service it. They have many long suction hoses to access the traps, but the closer they can get the better. If you're in any doubt, ask one of the contractors and obtain a written agreement to ensure they can service the trap.

### Fixed pump-out lines

You can install a fixed pump-out line to service grease traps. (These are not part of the pre-treatment and are not specified by Sydney Water.) You may require council approval and should consult a grease trap waste contractor if you intend to install a fixed pump-out line.

Experience has shown that a fixed pump-out line must be as straight as possible. Use long radius bends if bends are required. Lines must be a minimum diameter of 75 mm in a robust material. Fixed pump-out lines should terminate near the grease trap but not in it, as a flexible line must be attached to ensure all the waste is collected from inside the trap. Lines require cam-lock fittings at both ends to the pump-out contractor's specifications and caps for the cam-lock fittings to prevent odours when lines are not in use.

### Cleaning grease traps

Sydney Water customers with a grease trap will be part of our Wastesafe program. Wastesafe is the electronic tracking system we use to monitor the generation, collection, transport and disposal of grease trap waste.

An authorised Wastesafe transporter must regularly service your grease trap to avoid overflows and odours, and prevent grease from entering our wastewater system. Your authorised Wastesafe transporter must pump out the wastewater and clean the grease trap's internal surfaces during servicing.

We'll specify how often your grease trap must be pumped out, depending on the size of your grease trap and the volume and quality of greasy wastewater you generate.

You can find a list of [authorised Wastesafe transporters](#) on our website.

### Disconnecting a grease trap

If your business process changes and you no longer need to discharge trade wastewater to our wastewater system, you may need to contact us through [Sydney Water Tap in](#)<sup>®</sup> to vary or cancel your agreement by giving us 28 days' notice to disconnect your grease trap(s).

An authorised Wastesafe transporter must empty the grease trap before it's disconnected by a licensed plumber. The plumber puts a pipe through or around the grease trap (from inlet to outlet) and fills the trap with sand or blue metal.

## Repairing or replacing a grease trap

Although grease traps have a long lifespan, they do wear out. They can become hard to clean, develop holes and start to leak. It's sometimes difficult to repair grease traps that have held grease for many years. It's often better to replace them completely than repair them.

Seek advice from a grease trap manufacturer or licensed plumber on options for repair or replacement. Before proceeding, apply through [Sydney Water Tap in](#)<sup>®</sup> to vary your trade waste agreement.

## Multiple grease traps

If you manage a shopping complex or small shopping centre, you may have multiple grease traps. These must be big enough to treat all the trade wastewater from all the businesses that use them. If your grease traps aren't big enough, you must upgrade.

Multiple grease traps at the one site can have a maximum capacity of 30,000 litres. For example, you may have 6 grease traps of 5,000-litre capacity each.

### **Centralised pre-treatment for shopping centres**

If you need more than 30,000-litre grease trap capacity, you must install centralised wastewater treatment, such as dissolved air flotation (DAF).

## Grease extractors

Special site-specific requirements apply. Refer to [Listed pre-treatment for food businesses](#) on our website.



## Managing waste oil

You must collect neat fat and oil from cooking processes (refer to minimum pre-treatment table page 7) for recycling. It must not drain directly to a grease trap or our wastewater system.

Never pour waste oil down the drain or into your grease trap. Grease traps are not designed to accept waste oil tipped directly into them. Collect waste oil from deep frying and BBQs, store it in sealed containers in a properly bunded area, and have an oil recycler collect it.

## Floor and sink waste bucket traps

As outlined above, all commercial kitchens and food preparation areas must have authorised in-sink and in-floor waste bucket traps in all prep sinks and floor wastes.



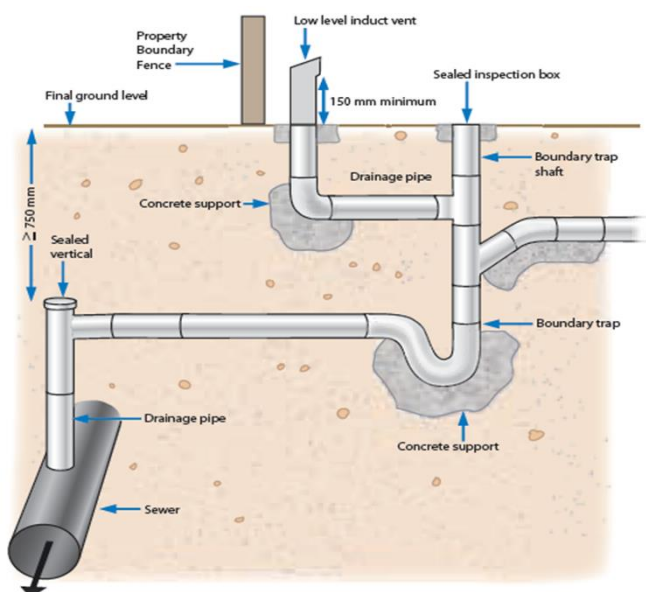
In-sink bucket trap



In-floor bucket trap

## Boundary trap

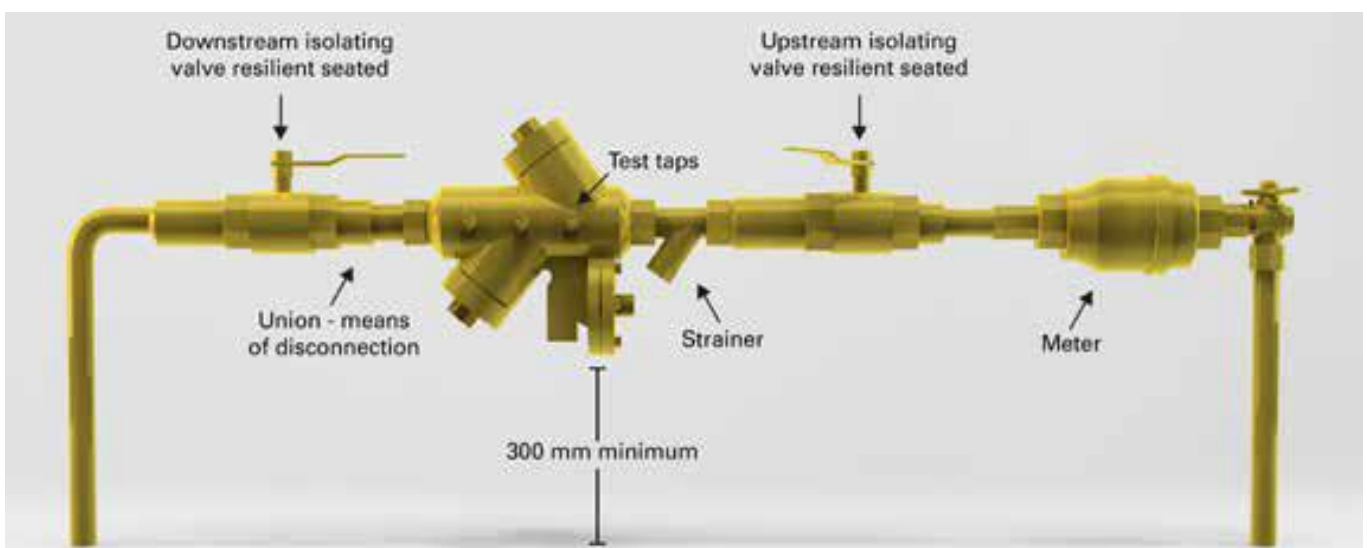
There must be a boundary trap on all retail food properties with a gravity connection to our wastewater system. If the property doesn't have a boundary trap and you apply to connect to discharge trade waste, you'll need to install a boundary trap at the boundary, or the point of connection if this is within the property boundary.



## Backflow prevention

You must comply with our backflow requirements as detailed in the *Sydney Water Customer Contract*. This means you must engage a backflow-accredited licensed plumber to install and test the backflow containment device(s), at the property boundary next to the water meter(s) servicing your property.

Your plumber should ensure you have adequate backflow prevention. You must also install a tap within 5 metres of any pre-treatment equipment (e.g. grease trap) and a backflow prevention device on the inlet side of the tap. Visit our website to learn more about [backflow prevention](#).



## Minimum pre-treatment requirements for retail food processes

\*These minimum pre-treatment volumes are only a guide. We will determine the pre-treatment volume when we assess your Tap in trade waste application. Please note: further trade waste pre-treatment assessment is required for combination ovens, wok tables and tunnel dishwashers.

Commercial process	*Minimum pre-treatment	In-floor and in-sink bucket traps
Cafeteria, childcare, canteen (and school hot meals)	1,000 L	Yes
Takeaway, including food court shops	1,000 L	Yes
Charcoal chicken	1,000 L	Yes
Wastesafe only, including school domestic science	1,000 L	Yes
Snack bar – coffee lounge – hot foods	1,000 L	Yes
Restaurant, café (1–69 seats)	1,000 L	Yes
Restaurant, café (70–199 seats)	1,500 L	Yes
Restaurant, café (200–399 seats)	2,000 L	Yes
Restaurant, café (400–599 seats)	3,000 L	Yes
Restaurant, café (600–799 seats)	4,000 L	Yes
Restaurant, café (800–1,000 seats)	5,000 L	Yes
Kitchen – hospital, nursing home (1–69 beds)	1,000 L	Yes
Kitchen – hospital, nursing home (70–199 beds)	1,500 L	Yes
Kitchen – hospital, nursing home (200–399 beds)	2,000 L	Yes
Kitchen – hospital, nursing home (400–599 beds)	3,000 L	Yes
Kitchen – hospital, nursing home (600–799 beds)	4,000 L	Yes
Kitchen – hospital, nursing home (800–1,000 beds)	5,000 L	Yes
McDonald's	1,500 L – 5,000 L	Yes
Pizza shop	1,000 L	Yes
KFC	2,000 L	Yes
Function centre (1–69 seats)	1,000 L	Yes
Function centre (70–199 seats)	1,500 L	Yes
Function centre (200–399 seats)	2,000 L	Yes
Function centre (400–599 seats)	3,000 L	Yes
Function centre (600–799 seats)	4,000 L	Yes
Function centre (800–1,000 seats)	5,000 L	Yes
Red Rooster	1,500 L	Yes
Delicatessen with hot food < 12 kL/day	1,000 L	Yes

Commercial process	*Minimum pre-treatment	In-floor and in-sink bucket traps
Hungry Jack's	1,500 L	Yes
Supermarket with chicken cooker	1,500 L plus grease removal device upstream of grease trap	Yes
BBQ wholesale (chicken)	1,500 L plus grease removal device upstream of grease trap	Yes
BBQ wholesale (pork, duck)	2,000 L plus grease removal device upstream of grease trap	Yes
BBQ restaurant	2000 L plus grease removal device upstream of grease trap	Yes
Wholesale food < 12 kL/day, caterer	1,000 L – 5,000 L	Yes
Hotel/motel kitchen (1–69 beds)	1,000 L	Yes
Hotel/motel kitchen (70–199 beds)	1,500 L	Yes
Hotel/motel kitchen (200–399 beds)	2,000 L	Yes
Hotel/motel kitchen (400–599)	3,000 L	Yes
Hotel/motel kitchen (600–799)	4,000 L	Yes
Hotel/motel kitchen (800–1,000)	5,000 L	Yes
Ice cream parlour	No grease trap	Yes
Butchers – retail	1,000 L	Yes
Fish (fresh outlet) no cooking	Large basket trap with fixed screen and removable basket	Yes
Chicken (fresh retail) no cooking	1,000 L	Yes
Smallgoods < 12 kL/day maximum	1,000 L – 5,000 L	Yes
Wholesale butcher < 12 kL/day maximum	1,000 L – 5,000 L	Yes
Bakery retail – hot bread, cakes	No grease trap	Yes
Bakery retail – with products containing meat cooked onsite	1,000 L	Yes



Commercial process	*Minimum pre-treatment	In-floor and in-sink bucket traps
Shopping centre > 30,000 L	Centralised pre-treatment	Yes