

Acceptance guideline 2: Retail food outlets with greasy oily wastes generated

Overview

The purpose of this Trade Waste Acceptance Guideline is to outline under what circumstances Icon Water will permit the discharge of liquid waste into the sewerage network.

Under section 35 of the *Utilities (Technical Regulation) Act 2014*, it is an offence to discharge into the water or sewerage network any substance that is likely to interfere with the network, or form compounds that would be likely to interfere, unless the consent of the utility is obtained. Significant fines, imprisonment or both may result from an offence. Discharges entering a sewer that are in breach of the conditions set out in this note will probably constitute a breach of section 35 of the *Utilities (Technical Regulation) Act 2014* and may lead to prosecution of the person discharging the waste, or allowing the waste to be discharged.

This guideline contains specific information on waste types and discharge requirements. The requirements of this guideline are in addition to the requirements specified in Icon Water's Trade Waste *Acceptance Guidelines 1: General Acceptance Criteria for Liquid Waste*. This guideline does not apply to abattoirs or meat/chicken processing and food manufacturers who are subject to separate specific discharge requirements.

Description of activity

There are a number of activities that fall within the group 'commercial retail food preparation activities – greasy/oily wastes generated', these are listed in *Table 1: Premise Specific Requirements*.

Table 1: Premise Specific Requirements

Type of Premise	Minimum Grease Trap Requirement
Boarding house or hostel in which more than 12 persons would ordinarily be resident	
Bakery, hot bread (including cooked on site pies, sausage rolls, creams or custards), doughnuts cooking, cheese cake shop (made on premises), patisserie, pavlova pantry, pies, pizza cooking (take-away/home delivery)	
Cafe, cafeteria, canteen	
Fish shop (cooking on site), kebab shop, noodle bar, sea foods (take-away), take-away food, yeero (yiros) shop, ice cream parlour (with hot food take-away)	
Barbequing Process	
Rotisserie, Charcoal BBQ, Hot plate	
Chocolate shop (made on premises)	
Club (with hot food), function centre, defence force mess	1000 L minimum
Coffee shop (hot food prepared), sandwich bar (with hot food cooking/eat in or take-away), delicatessen (hot food cooked) community hall (hot food cooked), child care centre, soup kitchen	
Ferry to shore galley waste	
Hospital kitchen or washing up	
Hotel (with counter lunches or restaurant or bistro), nightclub, motel kitchen / restaurant	
Nut shop (with nut roasting), salad bar	
Restaurant (including dessert, pasta meals, pizza, seafood)	
School canteen (cooking), school home science	
Service station forecourt food caravan	
Butcher or premises where fresh chickens are prepared	Total the capacity of all sinks, tubs and other fixtures plus three times the capacity of all hot water heating units. Minimum size 1000L

Table 2: Premise Specific Requirements Generating Liquid waste Volumes in Excess of 1100L/day

Type	Grease Trap Requirement
Barbequing Process Steam oven, Gas vat	2000 L minimum
Restaurants and takeaways using wok stoves with an attached trough and/or connection to sewer. Air cooled wok stoves	Minimum Size 1500 L depending on seating capacity.
Water cooled wok stoves	Minimum Size 1500 L depending on seating capacity
Fast food chain outlets operating extended hours Large supermarkets	Generally 2000 L minimum in consideration of extended operating hours, volume of operation and loading
Caterer or commercial kitchen	Grease trap size based on the equivalent size of restaurant that could be served by the kitchen
Shopping centre	The capacity of a communal grease trap in shopping complexes is 60% of the sum of the capacities specified for each individual food outlet if they were stand-alone establishments. NB This formula may not be applied in cases where the resulting grease trap size would be 1500 litres and the business types or hours of business are similar

Table 3: Maximum Daily Discharge

Maximum discharge (L/day)	Minimum capacity of grease trap (L)	Typical max number of restaurant seats or hospital beds	Typical maximum number of motel rooms
1,100	1000	70	35
3,200	1500	200	100
6,400	2000	400	200
9,600	3000	600	300
12,800	4000	800	
16,000	5000	1000	

Pre-treatment requirements

Grease arrester

Where the discharge is less than 1100L/d, a 1000L capacity grease arrester or equivalent approved pre-treatment device is required. Activities that typically generate a discharge of less than 1100L/d are listed in Table 1. It is generally accepted that where seating or beds are provided, if there are less than 70 seats/beds, the discharge will be less than 1100L/d.

Activities not listed with any daily flow values are likely to generate a liquid trade waste volume in excess of 1100L/d and will require a larger-sized grease arrester (as in *Table 2: Premise Specific Requirements Generating Liquid waste Volumes in Excess of 1100L/day*). For example, a cooking process involving a wok burner may generate high volumes of wastewater and the minimum size of a grease arrester required is 1500L. Fast food outlets such as McDonalds, Red Rooster and KFC require grease arrestors with a minimum capacity of 2000L. Barbequing processes with steam oven or gas vat require a grease arrester with a minimum capacity of 2000L.

It should be noted that a large arrester will enable a lower pump-out frequency and/or reduce the risk of paying a trade waste usage charge for failure to properly maintain pre-treatment equipment. Where there is a dishwasher (or dishwashers) on the premises, this should be taken into consideration in the sizing of the grease arrester by allowing 250L for each dishwashing cycle.

Maintenance and Cleaning Requirements

Following approval the customer must operate and maintain the system in compliance with the associated technical manual (if any), and the applicable requirements of this Guideline. The applicant must keep records on site of the maintenance calls, including the frequency and dates of the pump-outs and the name of the company contracted to collect the liquid waste.

A clean out / maintenance schedule must be implemented by the customer. The grease trap must be cleaned out at least every 13 weeks or sooner once:

1. A floating layer of grease 75 millimetres thick has formed on the surface,
2. The pH of the grease falls outside the range 4 to 11; or
3. Odours become noticeable.

During each clean-out, the sides and baffle(s) of the grease trap must be scraped to detach grease adhering to the surfaces, the grease trap must be completely pumped out (not just skimmed), and then refilled with water at least to the top of the grease trap outlet. It is each customer's responsibility to ensure that proper cleaning procedures are followed.

The initial clean-out frequency is used as an interim guideline to enable the applicant to commence the discharge, as it is the typical frequency for these types of activities. The applicant may apply to Icon Water to have the frequency of clean-out changed, depending on the scale of the business conducted at the premises. For example, a take-away store on the outskirts of town may have an infrequent turnover compared to take-away premises on a busy corner in the main street. In the event that Icon Water identifies the frequency of clean-out should increase, the business will be required to abide by these findings.

Icon Water may inspect such premises on a random basis to ensure grease arrestors are operating properly and to minimise the incidence of sewer blockages and chokes.

Maintenance Records

The customer must maintain records of servicing and clean outs of the grease traps and make them available for inspection by Icon Water upon request. The records must include the original of the contractor's waste receipt and the following information:

1. Date of service / clean-out;
2. Clean-out contractor's / waste transporter's business name and address;
3. License number of waste transport vehicle; and
4. The name of the driver.

The records must be maintained for at least 24 months. Icon Water may check these records on a random basis.

Sink and floor wastes

Sink wastes must be screened before being discharged to the sewerage system. While a fixed screen is a preferred device, it is recognised that some businesses may experience problems with the installation of these screens. In such situations, sink strainers must be used and a fixed screen should be considered where a cost-effective device is available. Icon Water should ascertain during its regular inspections that sink strainers are in place. Icon Water should require that a fixed screening device be provided, if strainers are not in use.

A basket arrestor must be installed on any floor wastes that are located in the food preparation and handling area for all the activities listed in Table 1. There must also be a fixed screen over all floor waste gullies. The basket should be removed, scraped and cleaned regularly to ensure the unit is operating properly.

Floor wastes in food preparation areas are to be connected to the grease arrestor or equivalent approved pre-treatment equipment.

Other issues

Barbequing processes

Businesses with chicken, duck and meat barbequing facilities with a steam oven or gas vat are required to install an oil and fat interceptor upstream of the grease arrestor.

Businesses with barbequing facilities must also abide by discrete oil disposal requirements as listed below.

Discrete fat and oil disposal

Any discrete fat and oil must be collected and disposed of. Discrete fat and oil must not be discharged into the grease arrestor. Only wash water from the cleaning of cooking equipment can be discharged to the sewerage system via the grease arrestor.

The discharger is required to place an oil collection container underneath the cooking equipment or install an oil collection system for the collection of fat and oil produced during the cooking process. The collected oil must be emptied daily (or as necessary) into a container for collection by an ACT EPA authorised oil recycler.

Storage of oil and chemicals

Oil and cleaning chemicals should be stored in an area where any spillage cannot drain to the sewerage or stormwater systems. Collected used oil and fats must not be disposed of into the sewerage systems and should be removed from the premises by an ACT EPA authorised oil and fat recycler.

Housekeeping practices:

- Icon Water require that floors are dry swept before washing to avoid wastes being caught up in the wash water discharged down the drain to the sewerage system.
- Icon Water require the pre-wiping of utensils, plates, bowls etc. to the scrap bin before washing up so as to minimise the amount of waste put down the drain to the sewerage system.
- The use of food waste disposal units (also known as in-sinkerators, in-sink food waste disposers, or garbage grinders) is not allowed in non-domestic premises, unless permitted by Icon Water under special circumstances (e.g. hospitals, nursing homes). These dischargers may incur a food waste disposal charge/bed). This permission is limited to the existing premises, e.g. if the hospital/nursing home kitchen is refurbished the food waste disposal unit must be removed. Wastes should instead be placed in the appropriate scrap bins.

Potato peeling appliances

Where possible, liquid trade waste from potato peeling appliances should not go through the grease arrestor in order to prevent fermentation processes occurring in the arrestor. Dry basket arrestors are to be installed for floor wastes in the food preparation area. The basket is to be removed, scraped and cleaned regularly.

Glass washers

Drainage from glass washers should **NOT** pass through a grease trap.

Garbage bin cleaning

The area must be roofed and bunded to prevent the ingress of stormwater to the sewerage system. When there is a grease arrestor installed on site, the liquid trade waste from the garbage bin cleaning area should pass through the grease arrestor. A dry basket arrestor with a fixed screen is to be fitted to all floor wastes in the washing area that drain to the sewerage system.

Use of additives in pre-treatment system

The use of bacterial, enzyme and/or odour controlling agents are prohibited.

Decommissioning existing grease traps

Icon Water will approve the decommissioning of an existing grease trap where that grease trap is no longer required. The contents of the grease trap are to be pumped out prior to commencing the decommissioning.

Further information

Additional information about the discharge of liquid waste into Icon Water's sewerage network is available at iconwater.com.au/tradewaste or by contacting us on **02 6248 3111** or via email on talktous@iconwater.com.au