Trade waste pre-treatment facilities installation requirements

**General**

All pre-treatment facilities installed must not be included on Unitywater’s list of facilities not approved for installation (please see appendix one). They must also have successfully completed the Water Services Association of Australia (WSAA) product appraisal process for trade waste pre-treatment facilities.

Note: Water authorities that are members of the Water Services Association of Australia (WSAA) have endorsed the WSAA appraisal process. It is expected that this process will replace the approval process currently used by individual authorities.

**Other requirements**

**In-floor dry basket arrestor (floor waste)**

All floor waste must include a shut-off valve mechanism that ensures there is no flow to the sewer when the basket is removed.

**Grease Arrestors**

Grease arrestors are installed in drainage systems to keep as much grease, fats and oils out of the sewerage system as possible. They separate solids and oils from water, leaving them behind when the water discharges into the sewerage system. This minimises blockages and odours, and ensures the sewage treatment plant is able to produce recycled water suitable for use in the community.

Grease arrestors are not designed to dispose of unwanted oils and grease. Servicing frequencies will be included as a condition of Trade Waste Discharge Permits. Unitywater does not clean out grease traps and you will need to contact a licensed private contractor to organise this service.

The minimum size grease arrestors generally approved for installation is 1,000 litres.

Grease arrestors with a capacity less than 1,000 litres may be approved as an adjunct to an existing grease arrestor or where site constraints make the installation of a 1,000 litre (minimum) grease arrestor inequitable or impossible.

All grease arrestors must:

- be fitted with air-tight lids;
- have a hose tap with backflow prevention installed within three metres of the arrestor;
- be installed in a manner that will enable servicing and maintenance to be completed in accordance with acceptable workplace health and safety guidelines; and
- be fitted with 100mm induct and educt vents.

Installation requirements for grease arrestors:

- Must be fitted with air-tight lids that are flush with the top of the arrestor.
- Must be fitted with 100mm induct and educt vents.
- Must have a hose tap with backflow prevention within three metres of the arrestor.
- Its placement allows servicing and maintenance to be completed according to Workplace Health and Safety guidelines.
- If a filter is a condition of the approval, a spare filter must be supplied.
Its remote servicing pipes must be at least 80mm diameter, and:

- must include ‘sweep’ type bends where pipe changes direction (i.e. elbows and tees must not be used);
- the pipe inlet at the grease arrestor end should have an 80mm lockable valve and an 80mm cam lock fitting – placed 900mm above the floor as close as possible to the arrestor;
- the suction end of the pipe (truck) should be easily accessible and have an 80mm male cam lock fitting and cap; and
- filled with water.

Servicing requirements for grease arrestors

Grease arrestors must be serviced regularly by a licensed liquid waste contractor. Intervals between servicing depend on the type and volume of waste discharged.

On average, **servicing will be required every four weeks**. Keeping to your recommended schedule will prolong the life of the arrestor and minimise odours.

Filters must be replaced with a clean, decontaminated filter at intervals not greater than eight weeks. The dirty filter must be transported off-site for decontamination and cleaning.

Do not attempt to service the grease arrestor yourself. The waste it collects must be removed and disposed of in an approved manner to protect the environment.

Alternatively, call your liquid waste contractor for an immediate service.

Do not use solvents or pesticides in your grease arrestor. If you are experiencing strong odours, check that vents, lids, frames and concrete surrounds are in good order.

Some enzymes, odour control agents and bacteria additives are approved for use, however separate approval is required and you should contact our trade waste advisor prior to discharging these substances the drain.

**Southern Region Trade Waste Advisor**

Phone: (07) 5420 0512

**Northern Region Trade Waste Advisor**

Phone: (07) 5475 7208

**Filters**

- If the arrestor’s approval includes a filter, a spare filter must be supplied with the unit.
- Filters must be replaced with a clean, decontaminated filter at intervals not greater than eight weeks.
- The filter removed from the arrestor must be transported off-site for decontamination and cleaning.
- Remote servicing pipes (pump out lines should only be used where the arrestor cannot be located in an easily assessable location).
- Must be 80mm diameter.
- Changes of direction and junctions must include ‘sweep’ type bends i.e. elbows and tees must not be used.
Inlet (grease arrestor end) of pipe should terminate with a lockable 80mm ball-valve and an 80mm cam lock fitting, 900mm above the floor as close as practicable to the arrestor.

Suction (truck) end should be located in an easily assessable position and terminate with an 80mm male cam lock fitting and cap.

After installation, all grease arrestors must be checked to ensure:

- the arrestor was not damaged during transport or installation;
- all baffles are fixed in the correction positions;
- all delivery bolts have been removed;
- formwork used during the installation has been removed; and
- All lids:
  - be removed;
  - are made air-tight;
  - are fitted correctly into the frame, flush with the top of the arrestor and filled with water.

Servicing

Servicing frequencies will be included as a condition of the Trade Waste Approval issued for businesses discharging to a specific arrestor. Frequencies vary according to:

- Type and size of the grease arrestor.
- Type and size of the business(es) discharging to the arrestor.
- Cooking and cleaning practices used at the business(es).

As a general guide, the periods between servicing should not be greater than three months.

Oil and solids / Water separators

Triple interceptor traps are only approved to pre-treat wastewater from areas where:

- no mechanical repairs are completed; and
- no washing or degreasing of motors is undertaken.

All oil and solids / water separators must:

- be fitted with air tight lids;
- have a hose tap with backflow prevention installed within three metres of the separator;
- be installed in a manner that will enable servicing and maintenance to be completed in accordance with acceptable workplace health and safety and environmental guidelines;

Sizing of grease arrestors.

The size of the grease arrestor required for a business or number of businesses will depend on the size and type of the business(es) and Unitywater.

Unitywater’s trade waste staff should be contacted for advice. Our brochure ‘Who has trade waste’ also includes a table of recommended grease arrestor capacities for various business sizes and types.
• discharge over a tundish and include a 50mm air gap;
• include a readily accessible sample point; and
• Feature a wastewater holding tank that:
  o has a capacity of at least 1,000 litres;
  o is fitted with air-tight lids; and
  o includes a high-level alarm that is noticeable from a usually occupied work area.

After installation all oil and solids / water separators must be checked to ensure:
• The separator was not damaged during transport or installation.
• All baffles and coalescing plates are fixed in the correct positions.
• All delivery bolts have been removed.
• Any form work used during the installation has been removed.

Unitywater’s Trade Waste Officers will usually require the installer or supplier of the equipment to attend a post-commissioning inspection that will include the activation of all pumps and alarms.

Servicing

Servicing frequencies will be included as a condition of the Trade Waste Approval issued for the businesses discharging to the arrestor. Frequencies vary according to:
• Type and size of separator.
• Type and size of business(es) discharging to the separator.

• Work and cleaning practices used at the business(es).

For a standard business and separator, the maximum period between servicing is usually three months.

Oil and grit arrestors (Triple-interceptor traps)

Triple-interceptor type traps are only approved to pre-treat wastewater from areas where:
• no mechanical repairs are completed; or
• no washing or degreasing of motors is undertaken.

Hardstand Areas

Areas that are greater than 900x 900mm and discharge to the sewer must be either roofed or have a rainwater diversion system installed.

Roofed Areas

The roof must overhang the bund by 900mm or 10% of the height (whichever is greatest). Also, the bund must be at least 100mm high.

Rainwater Diversion Systems

Systems without ‘first-flush’ diversion capacity are only approved to divert wastewater from areas that are left clean after use and where the ‘first-flush’ wastewater is of a quality that can be discharged to the environment without further treatment.

If the area draining to the system is used for bulk storage or distribution of fuels, a spill control system will also be required.
Spill control systems must include high contaminant and high-level alarms that are noticeable from a usually occupied work area.

The diverted wastewater will usually require further pre-treatment prior to discharge to Unitywater’s sewer.

Unitywater’s Trade Waste Officers will usually require the installer or supplier of the equipment to attend a post commissioning inspection that will include the activation of all pumps and alarms.

**Drainage pipe**

All equipment must be installed in accordance with the relevant codes of practice and regulations. As a general guide, all drainage piping upstream from a trade waste pre-treatment facility must be approved trade waste piping e.g. HDPE or equivalent.

**APPENDIX ONE**

There are no facilities that have been approved by the above water authorities that are not approved for installation.