

Guidelines for Pretreatment Facilities For Trade Waste Dischargers



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WHY ARE STANDARDS AND GUIDELINES NECESSARY?

Sewage treatment plants (STP) operated by Council have been designed to provide a satisfactory level of treatment for domestic sewage. Trade wastes, if uncontrolled, can cause serious problems to a sewerage system or the environment. Therefore commercial and industrial trade waste must be managed by Council. ***Refer to Council's Trade Waste Policy for requirements and Quality standards.*** Council will consider each application and place limits on trade waste discharges to the sewer. Trade waste acceptance limits are developed to:

- a) Ensure that public health and the environment are not put at risk.
- b) Protect the health and safety of people working in and around the sewerage system.
- c) Protect the Council's sewerage system.
- d) Encourage waste minimisation.
- e) Ensure that Council meets the requirements of the Protection of the Environment Act and other relevant regulations.
- f) Allow beneficial reuse of the sewage treatment plant effluent and/or biosolids.

Trade waste guidelines are developed to:

- a) Assist dischargers to provide facilities which enable compliance with trade waste acceptance limits.
- b) Provide advice on minimum pretreatment requirements.
- c) Encourage development initiatives to provide future compliance.

EFFECTS OF UNTREATED TRADE WASTE ON SEWERS

High BOD₅

- Overload treatment units at the sewage treatment plant.
- May accelerate the generation of sulphides in sewer mains and consequently odours and corrosion problems.

Suspended Solids

- Form deposits (in the sewers) which reduce the capacity of sewers and can lead to overflow conditions
- Accumulate in wet wells and pumping stations resulting in increased maintenance.
- Cause blockages and sewage overflows in the drains of commercial and industrial properties.
- Can deteriorate mechanical equipment (pumps and valves) by abrasion.
- Overload treatment units at the sewage treatment plant.
- Cause erosion.

Grease and Oil

- Cause the formation of deposits of greasy solids along the water line of sewers thereby reducing the sewer capacity. These deposits can lead to the breakaway of accumulated grease at times of high or very low flow.
- Accumulate in wet wells and pumping stations and cause blockages and failure of the pumps.
- Deposit in bends of the sewer and cause restrictions and blockages.
- Cause overflows in the drains of commercial and industrial properties.
- Accumulate on screens at treatment facilities causing blockages and repairs.

- Reduce the efficiency of sewage treatment.
- May cause non-compliance of the STP effluent with licence conditions.
- Form an oily film in the receiving water.

Low pH

- Can injure people working in the sewer system.
- Causes corrosion of sewer structures.
- May cause the release of toxic hydrogen sulphide gas.

High pH

- Can injure people working in the sewer system.
- Damages the sewer.
- May cause the release of toxic ammonia gas.

High Temperature

- Encourages volatile materials to be driven off from the sewage into the atmosphere.
- Increases the rates of reaction within sewer mains resulting in consumption of oxygen and increasing odours.
- Causes damage to sewer structures.

Heavy Metals

- Potentially toxic to treatment processes.
- Accumulate in biosolids and therefore limit its beneficial reuse.
- Metal residuals discharged with the sewage effluent into the environment may accumulate in marine organisms and get into the food chain.

Nutrients

This term is being used for substances necessary for the growth and reproduction organisms, mainly ammonia, nitrogen and phosphorus.

- Small increase in levels of nutrients can cause nuisance algal growth in river systems. These algae consume the oxygen in waterways and therefore threaten fish and plant life. Some algae, like blue green algal bloom, can be toxic to humans and animals.
- High levels of ammonia may cause unsafe conditions in sewer mains and pumping stations.
- Increase operational costs of sewage treatment plants.

Sulphur Compounds

- Sulphates can be reduced to sulphides and then cause odour and corrosion problems.
- Sulphites consume oxygen and may cause anaerobic conditions.
- Sulphides can cause odour and corrosion problems in sewers.
- Sulphides may result in the release of hydrogen sulphide gas and affect the safety of the personnel.

Flammable Substances

- Can cause fires and explosions in the system.

Cyanide

- Toxic to living organisms.

- May produce toxic gas in sewer.

Phenols

- Potentially toxic to biological treatment processes.

Chlorinated Solvents

- Potentially toxic to treatment processes.
- Toxic to people working in and around the sewer system.

Pesticides

- May inhibit the sewage treatment processes.
- May pass unchanged through the sewage treatment plant and adversely affect the environment.
- Limit the beneficial reuse of the STP effluent and sludge.
- Organochlorine pesticide are persistent in the environment and accumulate in living organisms.

SOME METHODS OF TRADE WASTE TREATMENT AND EQUIPMENT

Balancing Pit/Tank

A pit tank used to balance high strength discharge “peaks”. Averaging of waste may prevent “shock” loads of toxic substances discharged to the plant. Mixing of slightly acidic and alkaline wastes may bring the pH to a level acceptable for sewer discharge.

Biological Treatment

Involves bacteria consuming the organic parts of the waste within a controlled component of the pre-treatment system. Examples are trickling filters, fluidised beds, aerobic/anaerobic lagoons, activated sludge process.

Cooling Pit/Tank

A pit or tank used to cool wastewater to 40°C or less prior to discharge to the sewer.

Corrugated Plate Interceptor Separator (CPI)

This is a gravity separator designed to separate non-emulsified oil and solids from the water. The separator contains corrugated plates and uses gravity to remove pollutants (oils rise, solids sink). The plates speed up this process. “Quick Break” detergents and non-emulsifying pumps should be used.

Dissolved Air Flotation

Dissolved air flotation units are designed for the separation and removal of solids and grease and oil. Air is introduced into a waste stream under pressure. The oil and small particles cling to the small air bubbles and float to the surface where they are skimmed off. Organic polymers can be added to the wastewater to break down grease. A flocculant may be added to make the surface material stick together.

Dry Basket Arrestor

A pit or tank which is fitted with a fixed screen and removable mesh basket to capture large solids and fibrous material (eg. lint, fish scales).

General Purpose Pit

A pit which allows solids to sink and grease/oil to float, thereby removing them from wastewater.

Grease Arrestor

An above ground tank or in ground pit which allows kitchen wastewater to cool and the grease to separate from the wastewater. Council allows a maximum of 75mm of solidified grease in the grease arrestor.

Hydrocyclone

A hydrocyclone separation system uses centrifugal force to separate grease/oils from water.

pH Correction

The pH correction of acidic or alkaline waste is a step often required before discharge into the sewer or before treatment by biological means. pH correction is normally carried out in a tank or a pit, where mixing is provided. It can be achieved either in a batch or in a continuous flow through system. A pH control system basically measures the pH of the solution and controls the addition of a neutralising agent on demand to maintain the effluent within acceptable pH limits.

Screen

A facility used to catch solids before the waste discharges to sewer.

Sampling Point

An accessible boundary trap should be provided at the point of sewer connection to enable a suitable sampling location.

Trade waste approval is given on the basis that the effluent quality (*refer to Trade Waste Policy for quality standards*) must be achieved by good housekeeping and use of pre-treatment facilities. It is necessary to sample waste discharged to Council's sewer to ensure compliance with the required effluent quality.

Grab sampling can be achieved by using a wide mouthed plastic sampling jar of about 1 litre capacity securely strapped to the end of a wooden pole, alternatively, a dipper with nylon cord attached can be lowered into the waste. Care should be taken not to scrape the walls of boundary traps and dislodge unrepresentative matter into the sample.

The sewer inspection box at the boundary trap should be a minimum of 150mm in diameter and appropriately sealed, eg. With a rubber ring and screws or if trafficable area cast iron gas sealed cover with screws is to be installed.

MINIMUM TREATMENT REQUIREMENTS FOR TRADE WASTEWATER GENERATORS

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
AUTOMOTIVE/ENGINEERING		
Auto Dismantlers	Oil, Grease, Suspended Solids, Petroleum, Hydrocarbons, Metals, Flammables	Corrugated plate interceptor, Vertical Gravity Separator (VGS) or Hydrocyclone, sized accordingly
Car Detailing	Oil, Grease, Suspended Solids, Detergent	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly
Engine/Gearbox Reconditioning Parts Washing	Oil, Grease, Suspended Solids, Detergents, Kerosene, Lead	Corrugated plat interceptor, VGS or Hydrocyclone, size accordingly
Equipment Hire Company	Oil, Grease, Suspended Solids, Detergents, Kerosene, Petroleum Hydrocarbons	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly
Mechanical Workshop	Oil, Grease, Suspended Solids, Detergents, Kerosene, Petroleum Hydrocarbons	Corrugated plate interceptor, VGS or Hydrocyclone sized accordingly
Panel Beater/Spray Painting	Oil, Grease, Suspended Solids	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly
Radiator Repair	Suspended Solids, pH, Heavy Metals	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly
Service Stations (Workshop only)	Oil, Grease, Petroleum Hydrocarbons	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly
Service Stations Covered Forecourt	Oil, Grease, Petroleum Hydrocarbons	Covered forecourt discharge is generally permitted. Corrugated oil interceptor, VGS or Hydrocyclone, size accordingly
Vehicle Washing (commercial - manual cleaning)	Oil, Grease, Suspended Solids	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly. Wash area roofed and bunded.
SERVICE		
Printing presensitised photopolymer printing plate	Solvents, Silver, Ammonia Thiosulphate, Sulphite	Developing solvent wiped off with cloth, followed by water rinse, cloth discarded to solid waste,. Dilution pit. The production of the 'negative' is usually by normal

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
		photographic processes to which the usual photographic requirements apply
Printing	Flammable solvents/metals	Graphic processor - see photographic waste. Roller washing - use metal free colours - no solvent based cleaners <u>zinc plate manufacture</u> - pH adjustment - metal precipitate removal
Portable Toilets	Formaldehyde based chemicals	No treatment. Secure site. Lockable camlok fitting if discharging direct to sewer. Dumping point at a designated site determined by Council.
Septic Tank pump out (effluent only)	High Ammonia, Sulphides	Odour problems to be prevented by dosing of road tankers with hydrogen peroxide or by other means. The minimum dilution of 1:5 with fresh sewage is required at the point of discharge.
Stables	Suspended Solids	Dry basket arrestor, storm water control
Stone Working	Suspended Solids	Solids settlement pit/tank
Swimming Pool Municipal (first 2 mins backwash only)	Suspended Solids	Only first 2 mins of backwash is accepted into the sewer through a holding tank. The waste to be discharged to sewer at a control flow rate, remainder of backwash to stormwater with the EPA approval.
Veterinary Premises/Kennels	Suspended Solids	Dry basket arrestor
X-ray Developing	Silver, thiosulphate, sulphite	Photographic waste
MISCELLANEOUS		
Boiler Blowdown	Total Dissolved Solids, High Temperature	Cooling pit/tank to reduce wastewater temperature to less than 40°C. If the volume is less than three times the maximum blowdown volume, cooling calculations are to be provided by the applicant.
Cooling Tower Bleed Off	Corrosion inhibitors, biocides	No treatment. The use of

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
		products containing chromate is not permitted. Non-oxidising biocides must be registered by the NSW Health Department and allowed to be used by Council.
Dental Surgery Dental Chairs, Plaster Casts X-Rays	Amalgam Silver Suspended Solids Silver, Ammonia Thiosulphate, Sulphite	Amalgam separator built into the cuspidor manufacturer. Plaster arrestor. As per photographic procedure and developing.
Dental Technician Plaster Casts	Suspended Solids	Plaster Arrestor
Doctors Surgery Plaster Casts X-Rays	Suspended Solids	Plaster Arrestor
Garbage Can Cleaning Units/Hotels/Restaurants	Suspended Solids	Plaster Arrestor
Graphic Arts		
Hairdressing Salon		No treatment
Laboratory (School) Chemical Related	Chemicals	1000L balancing pit/tank
Laboratory (Other)	Chemicals	Balancing pit tank size to be assessed, after details of operation (including reagents used) are supplied
Medical Centre Plaster Cast X-Ray	Suspended Solids	Plaster Arrestor Refer Photographic Waste
Morgue		*subject to application
Optical Services (grinding of glass and plastic)	Suspended Solids	Baffled settlement tank, minimum 1 hour detention, to be easily accessible for cleaning
Pathology Laboratory	Chemicals Contaminated/infectious waste	Balancing pit/tank Waste should be sterilised by autoclaving or by chemical disinfection before discharge

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
Photographic Processing & Developing	Silver, Ammonia, Thiosulphate, Sulphite	Balancing pit/tank, silver recovery unit for silver bearing waste
Vehicle Washing (automatic robots) Self Service	Oil, Grease, Suspended Solids	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly. Wash area roofed and bunded. Re-use of wash water
Vehicle Washing (including engine)	Oil, Grease, Suspended Solids	Corrugated plate interceptor, VGS or Hydrocyclone, sized accordingly. Wash area roofed and bunded.
APPAREL/TEXTILE		
Dry Cleaning	Solvents	Dry cleaning solvents are not permitted into the sewer. See Laundry , if there is a washing machine on site.
Laundry (coin operated)	Lint, High Temperature.	Lint screens 1mm mesh, (washing machine internal screens acceptable). Cooling pit capacity calculated to cool discharge to below 40°C.
Laundry - Commercial or Industrial	Lint, High Temperature	As above, pH correction may be required.
Textile Factory	TRADE WASTE CONSULTANT RECOMMENDED	
CHEMICAL RELATED		
Adhesives/Latex Manufacture	TRADE WASTE CONSULTANT RECOMMENDED	
Chemical Factory	TRADE WASTE CONSULTANT RECOMMENDED	
FOOD/BEVERAGE		
Abattoir	TRADE WASTE CONSULTANT RECOMMENDED	
Bakery, Cakes, Pies, Sausage Rolls, (Cooked on site)	BOD, Suspended Solids, Grease	Grease arrestor sized accordingly, minimum capacity 1000L. Dry floor sweeping before washing, dry basket if floor wastes in food preparation.
Brewery	TRADE WASTE CONSULTANT RECOMMENDED	
Butcher	BOD, Suspended Solids, Grease	Grease arrestor, minimum capacity 1000L with fixed mesh screens in floor drain and sinks.
Cafe, Canteen & Cafeteria (hot	BOD, Suspended Solids,	

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
food cooked and served)	Grease	Grease Arrestor
Cannery	TRADE WASTE CONSULTANT RECOMMENDED	
Chicken, fresh, BBQ, charcoal, Meat cutting and preparation of fresh meat, cooking on site	BOD, Suspended Solids, Grease	Grease arrestor, minimum capacity of 1000L. Screens in sinks and dry baskets for floor wastes.
Commercial Kitchen/Caterer	BOD, Suspended Solids, Grease	Grease arrestor size related to size of operation, minimum capacity 1000L. Dry basket arrestor if floor waste is in food preparation and handling area.
Confectionery	TRADE WASTE CONSULTANT RECOMMENDED	
Dairy Products	TRADE WASTE CONSULTANT RECOMMENDED	
Delicatessen (no hot food cooked, no meat cooked)		Dry Basket arrestor. Written declaration required that no hot food is prepared
Fast Food Outlets (eg McDonalds, Red Rooster, KFC)	BOD, Suspended Solids, Grease	Grease arrestor, minimum capacity 1500L. Dry basket arrestor if floor waste is in food preparation and handling area.
Fish, Fresh (retail) no cooking on site	Scales, Fish gut	Screens in sinks and dry basket arrestors for floor waste, sink to drain to dry basket arrestor. For large operations such as Fish Co-op, trade waste consultant recommended.
Fish Shop cooking on site	Scales, Grease	Screens in sinks-fixed mesh screen & basket arrestor. For large operations such as Fish Co-op, trade waste consultant recommended.
Fruit & Vegetable Market (retail)	Suspended Solids	Dry basket arrestor if floor waste is in food preparation and handling area.
Fruit/Vegetable Processing Factories	TRADE WASTE CONSULTANT RECOMMENDED	
Hospital Kitchen	BOD, Suspended Solids, Grease, High Temperatures	Grease arrestor, Dry basket arrestor if floor waste is in food preparation and handling areas. If a garbage grinder installed, additional grease arrestor capacity is required.

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
Hot Bread - pastry only prepared on premises (No pies, sausage rolls, creams or custards)	Suspended Solids	Dry sweeping of floor before washing - dry basket arrestor if floor waste is in food preparation and handling area.
Food Processing Factories (including processed food)	TRADE WASTE CONSULTANT RECOMMENDED	
Hotel (with counter lunches or restaurant)	BOD, Suspended Solids, Grease	Grease arrestor
Ice Cream Parlour	BOD, Grease	Grease arrestor, minimum capacity 1000L.
Motel (food prepared on site)	BOD, Suspended Solids, Grease	Grease arrestor
Nursing Home Kitchen	BOD, Suspended Solids, Grease	See hospital kitchen
Oyster Processing (Shucking)	Grit, Suspended Solids	Dry basket arrestor, solids settlement pit, minimum capacity 1000L.
Patisserie	Grease	See Bakery
Pizza Cooking Takeaway, no seats	BOD, Suspended Solids, Grease.	Grease arrestor, minimum capacity 1000L and dry basket arrestor.
Pizza cooking restaurant	BOD, Suspended Solids, Grease.	See Restaurant
Potato Peeling (small operation)	BOD, Suspended Solids	Stainless steel basket in peeling machine and 1mm screen dry basket arrestor
Poultry Abattoir	TRADE WASTE CONSULTANT RECOMMENDED	
Restaurant	BOD, Suspended Solids Grease.	Grease Arrestor. Dry basket arrestor if floor waste is in food preparation and handling area.
Seafood (wholesale) no hot food cooking	Suspended Solids	Oysters shucking - general purpose pit, minimum capacity 1000L and dry basket arrestor.
School: Home Science Canteen Cooking	BOD, Suspended Solids Grease.	Grease arrestor, minimum capacity 1000L Dry arrestor if floor waste in food preparation and handling area
Shopping Centre (including food preparation)		See relevant types of business. For sizing of grease arrestor

DISCHARGER SOURCE	CHARACTERISTICS OF WASTEWATER	MINIMUM PRE-TREATMENT REQUIRED
Smallgoods Manufacture	TRADE WASTE CONSULTANT RECOMMENDED	
Soft Drink Manufacturer	TRADE WASTE CONSULTANT RECOMMENDED	
Supermarket incorporating butcher, fruit/vegetables section	BOD, Suspended Solids, Grease.	Grease arrestor, minimum capacity 1000L. Dry basket arrestor if floor waste is in food handling area.
Takeaway Food Outlets	BOD, Suspended Solids, Grease.	Grease arrestor, minimum capacity 1000L. Dry basket arrestor if floor waste is in food preparation and handling area.
Vegetable cleaning and peeling	BOD, Suspended Solids.	Dry basket arrestor, solids settlement pit. For large wholesale operations: screens, proprietary settler, pH adjustment
Winery	TRADE WASTE CONSULTANT RECOMMENDED	
MATERIALS		
Tannery	TRADE WASTE CONSULTANT RECOMMENDED	
Timber Processing	TRADE WASTE CONSULTANT RECOMMENDED	
METAL		
Electroplating	TRADE WASTE CONSULTANT RECOMMENDED	
Metal Finishers	TRADE WASTE CONSULTANT RECOMMENDED	
SERVICES		
Boarding House/Hostel	BOD, Suspended Solids, Grease	Grease arrestor sized accordingly, minimum capacity 1000L, if hot food is prepared.
Community Halls (Hot food cooked and served)	BOD, Suspended Solids, Grease.	Grease arrestor sized accordingly, minimum capacity 1000L. Dry basket arrestor if floor waste is in food preparation and handling area.
Crafts (eg clubs) - 200L to 1000L/day eg. Clay pottery, gem stones, jewellery	Suspended Solids	Plaster arrestor
Crafts (eg Schools, colleges, cottage industries, clay pottery, gem stones, jewellery) - in excess of 1000L/day	Suspended Solids	General purpose pit, minimum capacity 1000L.

1. Garbage disposal units, “INSINKERATORS”, are not to be installed.

2. **Bunding**

The area around all treatment installations must be banded so that no spillage or overflows of liquid trade waste influent or effluent, sludge, or treatment chemicals can flow by gravity, or by any automated mechanical means to the sewer or stormwater system.

3. **Cleaning Compounds**

Only “Quick Break” detergents should be used.

The suppliers of cleaning compounds should ensure on site specific basis, that the quality of the untreated trade wastewater generated from the cleaning operations is such that the final sewer discharge, through the CPI system, meet guidelines limits for oil and grease.

4. Additional information may be obtained from Council’s Trade Waste Section.

Maintenance of Vertical Gravity Separator

Maintenance/cleaning procedures should initially be allowed each month. Observations will determine whether it should be cleaned more or less frequently. Sludge should be removed at least every 12 weeks. The spiral pack (SPAK) shall be removed and inspected every 12 months. It must be replaced, if any swelling or cracking occurred.

Maintenance should include the following procedures:

- The VGS cover, with SPAK suspended, is fitted with stirring paddles which project into the Free Oil Zone at the top of the unit. By revolving the top anticlockwise for 3 revolutions, sludge build up on the fluid surface is broken up. Because the SPAK is attached to the cover, contaminants that may have attached themselves to the SPAK should be removed during cleaning procedure
- Draining of sludge from the bottom of the unit into a solids container
- Cleaning of strainer (if installed) and removal of debris
- Inspecting oil, sludge and water outlets for blockages
- Pumping out the influent pit to remove any oil and settled sludge
- Maintaining a pump according to manufacturer’s recommendations.

The owner of any trade waste treatment facility should keep a log book on maintenance, pump outs and wastewater test results (if applicable).

WASTE MANAGEMENT

The cleaning frequency of a treatment facility is governed by the quantity of accumulated waste, it is therefore in management’s interest to ensure minimal waste is disposed into the facility. A lighter load on a grease or oil arrestor can reduce cleaning frequency and maintenance costs. The following housekeeping tips may be helpful in training staff and achieving better results from a treatment facility.

Kitchen type waste:

- Use water sparingly
- Use aluminium foil to collect grease and oil spills around stoves, fryers etc.
- Use minimal grease and oil for cooking
- Use detergent sparingly
- Place screens on sink drains to keep solids from washing down the drain
- Scrape cooking utensils and plates before washing

- Dispose of oil and grease separately and not down the drain
- Do not put coffee grounds or tea leaves down the sink

Workshops, garages, service stations, etc.:

- Ensure the wash area is covered and bunded to secure all wastewater. Connect all drains to pre-treatment. This will ensure that all contaminated waste is confined, collected and treated.
- Forecourt area must be roofed and graded to exclude stormwater.
- Dry sweeping/cleaning before hosing.
- Use water sparingly. If possible install fine spray nozzles on a spray system to reduce water consumption.
- Reuse water whenever possible.
- Use “Quick Break” detergents that are certified for performance by the supplier. This will help remove grease in the pre-treatment stage and can also reduce the level of petroleum hydrocarbons.
- Use cleaning products that have the pH of 7-10. Metals can dissolve if the pH of waste is higher or lower. In this form they are very difficult to remove without expensive pretreatment and can cause damage to the environment.
- Reduce the amount of detergents used.
- Use drip trays to catch oil. Plug any parts that tend to leak.
- If parts are washed in a solvent cleaning bath it should be done in a bunded area, so solvent can be collected and disposed of separately.
- Ensure that kerosene, petrol and solvents are not discharged into the sewer even in small quantities. Drain parts over the solvent bath before hosing down.
- Arrange for collection of oils, grease and solvents for recycling.
- Drain oil and fluids from engines, gear boxes and other parts, before dismantling into storage containers. Do not discharge oil into the sewer.
- Store oil, solvents, cleaning chemicals in a bunded area not connected to the sewer.
- Do not discharge caustic bath and rinse into the sewer.
- Do not use caustic as a cleaner. This raises the pH of the waste.

If these suggestions are followed, the pump out frequency can be reduced, blockages in drains may be avoided and money can be saved. The correct management of trade waste and proper maintenance or treatment facilities will result in a cleaner environment.

As a general rule grease arrestors will require cleaning each 4 weeks. This period will vary depending upon load and nature of waste. The above tips may provide opportunities to extend the period between pump outs.