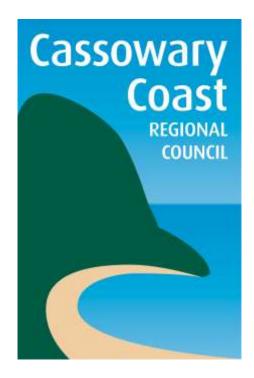
# **CASSOWARY COAST REGIONAL COUNCIL**



# TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

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# TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

# **1.0 INTRODUCTION**

### **1.1 GENERAL**

Trade waste is defined under the Water Supply Act as "water- borne waste from business, trade or manufacturing premises, other than waste that is a prohibited substance, human waste or stormwater".

The Environmental Protection Act 1994 prohibits the pollution of the environment by liquid wastes including trade wastes.

Businesses that generate trade waste must either: seek an environmental authority for its discharge to the environment; have it treated at an approved treatment facility; or seek approval from the water authority (Council) to discharge to the sewerage system.

The Cassowary Coast Regional Council provides a sewerage system primarily for the transport and treatment of domestic sewage. Payment for this service is collected through sewerage charges on each property. The sewerage system may also be used, with the approval of Council, for the transport and treatment of trade waste. Additional charges are payable for the discharge of trade waste to the sewerage system.

Domestic sewage consists mostly of water, which after treatment to reduce biodegradable material, suspended solids and nutrients, can be disposed of in accordance with licence requirements.

Trade waste may have an organic strength many times that of domestic sewage and may overload the treatment facility. Trade waste may also contain a variety of exotic substances such as heavy metals, organic solvents and chlorinated organics which sewerage systems are not designed to treat. These substances may:

- pass through the plant untreated, resulting in environmental contamination;
- pose a serious risk to the safety and health of sewerage workers;
- damage the sewerage system;
- inhibit biological treatment processes; or
- accumulate in sludges.

Council's policy is to accept biodegradable waste into the sewerage system provided that the system is of adequate capacity to effectively collect, transport and treat the waste.

Council may consider the acceptance of trade waste containing toxic or hazardous substances and nondegradable pollutants to sewer only after the waste has been pre-treated by on site 'best practicable treatment' to ensure sewer admission limits are not exceeded.

Council must meet all legislative environmental requirements relating to the disposal and/or reuse of effluent and sludge from its sewerage system. Under the *Environmental Protection Act 1994*, all discharges to receiving waters are required to be treated to a standard set down in licences, which will maintain or enhance water quality and environmental values.

#### **1.2 PURPOSE**

The purpose of this plan is to set out a consistent framework on how Council manages trade waste discharges and meets its obligations under legislation and licences.

### 1.3 POLICY

Council undertakes to conditionally accept trade waste into its sewerage systems provided that:

- the waste at the point of discharge to Council's system does not contain substances that may be toxic or harmful to Council's infrastructure, processes, personnel or the environment
- the Council system is of adequate capacity to convey and treat the trade waste.

Where necessary, Council may impose conditions of pre-treatment on trade wastes before Council will accept the waste into its systems.

Council will undertake a risk based monitoring program of trade waste discharges to ensure compliance with conditions and will implement a system of charges that reflect full recovery of costs.

#### **1.4 LEGISLATION**

It is an offence to discharge trade waste to the sewer unless a trade waste approval has been issued by Council in accordance with the provisions of the Water Supply (Safety and Reliability) Act 2008. Any person wishing to discharge trade waste to sewerage must apply for a trade waste approval.

It is an offence for a person to discharge waste (including trade waste) other than uncontaminated stormwater drainage (Local Government Act 2009).

A list of legislation relevant to trade waste control and acceptance to sewer is given in Appendix 1. This is not a complete listing of all legislation pertaining to the control of trade waste.

## 2.0 DEFINITIONS

Approval Holder	A person who holds a Trade Waste Approval.	
Authorised Agent	Person or firm appointed by the Owner to act on their behalf. Notification of such appointment is to be lodged in writing with Council.	
Council	Reference to Council in this document includes Cassowary Coast Regional Council and any person appointed or authorised by Council to act on behalf of Council as the case may require.	
Domestic sewage	Faecal matter and urine of human origin and liquid household wastes from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings.	
Measuring	For charging purposes, trade wastes are measured by quantity (volume discharged) and quality (contamination level).	
	- The QUANTITY discharged is measured in kilolitres (kL).	
	- The QUALITY of waste is measured in chemical terms.	
The following common quality measures give indications of the amount of organic matter in the trade waste.		

Biochemical Oxygen Demand	(BOD <sub>5</sub> )
Suspended Solids	(SS)
Total Oil and Grease	(TOG)

These terms are measured in milligrams per litre (mgl-1) or kg

Occupier	As defined in the Local Government Act 2009.
Owner	As defined in the Local Government Act 2009. (For most situations, the Owner is the registered proprietor of the land under the Land Title Act 1994)
Premises	As defined in the Water Supply (Safety and Reliability) Act 2008.
Trade waste	As defined in the Water Supply (Safety and Reliability) Act 2008.
Trade Waste Approval	Written approval by Cassowary Coast Regional Council for a person to discharge trade waste to the Cassowary Coast Regional Council sewerage systems issued under section 180(1) of the Water Supply (Safety and Reliability) Act 2008.
	A "Trade Waste Approval" for Category 1 will be issued for an indefinite period unless revoked by Council due to non-compliance with the approval conditions or unless requested by the Approval Holder in the event the business closes or change of ownership or address.
Trade Waste Inspector	A person appointed by the Council to carry out inspections of premises from which trade wastes are being discharged or proposed to be discharged to its sewerage. The term includes a person appointed in an acting capacity to carry out the duties of a trade waste officer.
Trade Waste Officer	A person appointed by Council to oversee the disposal of trade waste in accordance with Council's trade waste environmental management plan and provide advice on acceptable methods of disposal of trade waste, including legal, economic and environmental aspects. The term includes a person appointed in an acting capacity to carry out the duties of a trade waste officer.

All other terms have the meaning given to them in the following Act/s (as applicable):

- Water Supply (Safety and Reliability) Act 2008;
- Plumbing and Drainage Act 2002;
- Environmental Protection Act 1994;
- Local Government Act 2009.

# **3.0 CONTROL OF TRADE WASTE**

## 3.1 APPROVALS

A Trade Waste Approval is the written approval from Council that states the requirements and conditions under which trade waste is allowed to discharge to sewer.

Prior to July 2014, trade waste approvals and conditions were issued to the trade waste generator. From 1 January 2015, trade waste approvals were only issued to the property owner and transitional arrangements were established for the period between July 2014 and 1 January 2015 to transfer trade waste approvals from the trade waste generator to the Owner.

As from 1 July 2018, the person discharging trade waste into Council's sewerage system must be the holder of a Trade Waste Approval. The Approval Holder is responsible for ensuring compliance with Trade Waste Approval conditions.

All new applications seeking approval to discharge trade waste to Council's sewerage system, after 1 July 2018 must be made by the person who will be discharging or permitting the discharge of the trade waste from premises into Council's sewer system and submitted in writing on the 'Application for Trade Waste Approval' form. Where an application processing fee is nominated in Council's fee and charges schedule, the application forms must be accompanied with the relevant payment. Copies of the form are available on the Council website or by application to Council's Water Section (Ph 07-40302222). If the application is approved, Council will issue an approval with relevant conditions. Trade waste charges will be issued with the rates notice at each billing cycle.

Council will accept an application for a Trade Waste Approval from the followings persons:

- (a) the Occupier of the premises who is carrying on an activity at the premises that generates trade waste, and is not the Owner of the premises, whose application is signed by the Owner of the premises; or
- (b) the Owner (or an Authorised Agent on behalf of the Owner) of the premises who is carrying on an activity at the premises that generates trade waste.

If the applicant for the Trade Waste Approval is not the Owner of the premises, the Owner of the premises must sign the Occupier's 'Application for Trade Waste Approval' form:

- (a) consenting to the Occupier of the premises:
  - (i) carrying on the activity at the premises that generates trade waste; and
  - (ii) applying for the Trade Waste Approval for the purpose of discharging trade waste from the premises into Council's sewer system; and
- (b) asking Council to provide the trade waste services to the premises, for the purposes of the levying, and the liability for payment, of the trade waste utility charges and other trade waste fees.

For trade waste generated within a multi-tenanted lot by a person unknown, and discharged into the lot's sewerage infrastructure (irrespective of whether it is pre-treated within the tenanted facility or in a common area), the Owner of the multi-tenanted lot is taken to be the person who discharges the trade waste into Council's sewerage system unless the contrary is shown, and the Owner is the person who should apply for a Trade Waste Approval from Council unless the contrary is shown.

By the Owner of the premises:

(a) obtaining a Trade Waste Approval as the person who is carrying on an activity at the premises that generates trade waste; or

(b) signing the Occupier's 'Application for Trade Waste Approval' form, consenting and asking for the services as stated in the form,

The Owner is the person who asks Council to provide the trade waste service to the premises, for the purposes of the levying, and the liability for payment, of the trade waste utility charges and other trade waste fees.

Trade Waste Approval conditions may permit the use of common pre-treatment devices in Body Corporate or multi-tenanted lease arrangements. Irrespective of whether or not common pre-treatment facilities are used, a separate Trade Waste application must be lodged for each person/business generating trade waste application within a Body Corporate or lease.

Applications for new Trade Waste Approvals must be lodged prior to commencement of any trading, or discharge of trade waste into Council's sewerage system. Applications arising from amendments to business conditions must be lodged prior to the discharge of trade waste arising from the change.

The following circumstances, where trade waste is generated and is to be discharged into Council's sewerage system, will require application for a Trade Waste Approval:

- A development application for a new premises where trade waste is to be generated. Refer listing in Appendix A3-2;
- A change of ownership of the premises;
- A change of occupation of the premises;
- Where trade waste is being generated at a premises and no Trade Waste Approval has been issued.

The Approval Holder is required to lodge an 'Application to Amend Trade Waste Approval' where an approval exists and where the following circumstances arise:

- A change to the nature of any existing business activity that materially impacts the volume or nature of a trade waste discharge;
- Fit-outs that require plumbing approval.

Applications should include details of the proposed method of pre-treatment to be used to ensure trade waste meets sewer admission limits. Treatment plans should be forwarded in triplicate with the application. One copy will be returned stamped "approved- trade waste only" if satisfactory.

Where a trade waste is deemed not able to be accepted into Council's sewerage system, an approval will not be issued and alternative arrangements for disposal of wastes are to be made by the generator of the trade waste. Advice on treatment and disposal options for such wastes may be available from Council.

Any plumbing and drainage work associated with trade waste facilities must be in accordance with the Plumbing and Drainage Act 2002 and the Standard Plumbing and Drainage Regulation 2003, the National Plumbing and Drainage Code (AS/NZS 3500) and the approved sewerage drainage plan. All works must be carried out by a licensed plumber and/or drainer.

#### 3.2 TERM OF APPROVAL

Trade Waste Approvals once issued will remain in force indefinitely unless cancelled or a new application is required pursuant to the requirements herein.

# 3.3 SUSPENSION, CANCELLATION OR AMENDMENT OF TRADE WASTE APPROVAL

Grounds and procedures for suspension or cancellation of a trade waste approval are defined in section 182-184 of the Water Supply (Safety and Reliability) Act 2008.

Terms and conditions of a Trade Waste Approval in respect of any matter occurring before the suspension or cancellation, including the payment of charges owing, will continue to have force and effect after the suspension or cancellation of the Trade Waste Approval.

Grounds and procedures for amending a trade waste approval are defined in section 185 of that Act.

## 3.3 PENALTIES AND RECOVERY OF COSTS

Council may prosecute any person who commits a breach of the relevant Acts and Regulations, or who refuses or neglects to comply with any direction or requirement by Council pursuant to the relevant Acts and Regulations. Penalties are set out in the appropriate Acts and Regulations, and include substantial fines.

Council may recover costs of repairing the damaged sewerage system from a person causing damage to the system by discharging unauthorised material, making an unauthorised connection or interfering with infrastructure.

# 4.0 SEWER ADMISSION LIMITS

Any waste discharged to Council's sewer must at all times comply with the Trade Waste Sewer Admission Limits as set out in Appendix 2, unless otherwise specified in the trade waste approval. Council will undertake periodic review of these limits.

The sewer admission limits, unless otherwise specified in the approval are absolute maximums. The dilution of trade waste with water to achieve compliance with the sewer admission limits is prohibited.

The trade waste stream and domestic waste stream should, where ever practicable, discharge separately to the sewer. Where there is a common discharge pipe, allowance for the domestic component will be made to estimate the actual trade waste component strength.

Council requires that Approval Holders implement waste minimisation practices and install best practice pretreatment processes to reduce both the volume and the contaminant load of waste discharges to sewer. Council has obligations to avoid sewer overflows and consequently may impose limits on the rate and timing of trade waste discharges.

Where a pre-treatment device is installed, the Approval Holder must ensure all recommended service intervals are followed to maximise the device's efficiency and minimise the contaminant load of the waste discharged to sewer.

All persons, including Approval Holders, are prohibited from discharging or causing to be discharged into Council's sewerage system prohibited substances as listed in Schedule 1 of the Water Supply (Safety and Reliability) Act 2008 and further detailed in Appendix 3.

# **5.0 DISCHARGE CATEGORIES**

All trade waste accepted to the sewer following pre-treatment will be classified according to the following two categories for the purposes of approval, control and charging. Typically category 2 waste streams are high risk to Council's sewerage system and will require very specific assessment as outlined in Clause 7.2 before any discharge approval will be issued.

#### TABLE 1: TRADE WASTE CATEGORIES

Parameter	Category 1 low strength/any volume	Category 2 high strength/any volume
Biochemical Oxygen Demand (BOD <sub>5),</sub> mg/L	≤600	>600
Chemical Oxygen Demand (COD), mg/L	≤1200	>1200
Suspended Solids, mg/L	≤600	>600
Total Kjeldahl Nitrogen, mg/L N	≤150	>150
Total Phosphorus, mg/L P	≤50	>50
Volume, kL/annum	unlimited	unlimited
Maximum TPH	30 mg/l	30 mg/l
BTEX Benzene	≤1 mg/l	≤1 mg/l
BTEX Ethyl Benzene	≤2 mg/l	≤2 mg/l
BTEX Toluene	≤2 mg/l	≤2 mg/l
BTEX Xylene	≤2 mg/l	≤2 mg/l
Trade Waste Approval Req'd	Yes	Yes
Charges	<ul> <li>Annual access utility charge</li> <li>Volumetric utility charge</li> </ul>	<ul> <li>Annual access utility charge</li> <li>Quantity/charge on total annual load</li> <li>Minimum charge applied</li> </ul>

Acceptance of waste under any category is conditional on the waste meeting Council's Sewer Admission Limits in Appendix 2 unless otherwise specified in the trade waste approval.

It is the responsibility of the Approval Holder to install, operate and maintain 'best practicable' devices or process to ensure sewer admission limits as approved are not exceeded.

In the event of a significant change in the strength of a trade waste approved under Category 1, Council reserves the right to refuse to accept the trade waste or require the Approval Holder to make an amended trade waste approval application. Furthermore, until such application is considered, approved (at Council's discretion) and conditional works are completed by the Approval Holder, Council may consider the trade waste be treated as a Category 2 trade waste for the purposes of charging and monitoring.

# 6.0 APPROVAL CONDITIONS

## 6.1 CATEGORY 1 APPROVAL CONDITIONS

The Trade Waste Approval states the terms and conditions the Approval Holder must observe to discharge trade waste into Council's sewerage system. These include, but are not limited to:

- expiry/renewal date
- the location of the premises and nature of the occupancy;
- the type and composition of trade waste that may be discharged;
- the quantity of trade waste that may be discharged;
- the rate of discharge, including maximum rate of discharge (in litres per second l/s or kilolitres per hour);
- the time when trade waste may be discharged;
- the period for which trade waste may be discharged;
- the method for estimation or measurement of discharge volume;
- provisions for measurement and sampling of discharge prior to entry to sewer;
- details of any pre-treatment required;
- conditions for maintenance of pre-treatment equipment
- conditions for removal of waste from pre-treatment equipment;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment;
- the powers of Council to enter premises in relation to any matter with regard to trade waste control;
- termination conditions;
- additional charges for non-compliance;
- the obligations with respect to payment of charges, fees and penalties; and
- any other conditions considered by Council to be appropriate.

#### 6.2 CATEGORY 2 APPROVAL CONDITIONS

The Trade Waste Approval states the terms and conditions the Approval Holder must observe to discharge trade waste into Council's sewerage system. These include but are not limited to:

- expiry/renewal date
- the location of the premises and nature of the occupancy;
- the type and composition of trade waste that may be discharged;
- quantity of waste that may be discharged;
- the rate of discharge, including maximum rate of discharge (in litres per second l/s or kilolitres per hour);
- the time when trade waste may be discharged;

- the period for which trade waste may be discharged
- details of self-regulation monitoring program including:
  - sampling point
  - frequency of sampling
  - method of sample collection and type of sample to be collected
  - analyses required
  - methods of analyses
  - laboratory to be used
  - data transfer and availability to Council;
- type, design and location of flow measuring equipment and requirements for calibration;
- methods to be used for estimation of data lost due to failure of sampling program or flow measurement instrumentation;
- provision for measurement and sampling of discharge prior to entry to sewer;
- details of any pre-treatment required;
- conditions for maintenance of pre-treatment equipment
- conditions for removal of waste from pre-treatment equipment;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment and disposal of waste;
- the powers of Council to enter premises in relation to any matter with regard to trade waste control;
- the obligations of the Approval Holder concerning any variations to operation or treatment processes that may affect discharge quantity or quality including change of business type;
- the obligations of the Approval Holder on suspension or cancellation of an approval;
- the formula for calculation of the quantity and quality charge to be levied on the rates notice.
- the obligations with respect to payment of charges, fees and penalties;
- additional charges for non-compliance;
- any other conditions considered by Council to be appropriate.

## 7.0 EFFLUENT PRE-TREATMENT / IMPROVEMENT PROGRAMS

#### 7.1 CATEGORY 1 WASTE

#### 7.1.1 General

For Category 1 waste, the installation of a properly sized, approved best practice pre-treatment device, together with an acceptable maintenance program in accordance with the trade waste approval conditions will be deemed to provide a satisfactory effluent with respect to the Parameters(s) in Table 1.

## 7.1.2 Basic Pre-treatment Devices

The nature of pre-treatment device that Council deems necessary for a particular business type is listed in Appendix 3.

In some instances, where a trade waste approval application is made for existing premises, and site constraints do not allow construction of the nominated device and or size, Council at it's discretion may permit the discharge of the trade waste to Council's sewerage system with a smaller pre-treatment device (or no pre-treatment device) subject to payment of additional sewer loading charges.

## 7.1.3 Sizing of Pre-treatment Devices

The following sizing requirements for basic pre-treatment devices apply to all new or replacement devices installed as from July 2014, unless otherwise conditioned by Council.

- The minimum size of new or replacement basic pre-treatment devices (grease traps and oil traps) must be 1000 litres.
- Grease traps and oil traps must be sized to provide a minimum of one hour retention at peak hourly trade waste flow using industry fixture flows listed in Appendix A3-5.
- Council at its discretion may consider requests for variations on sizing of devices if applications are supported by calculations by a qualified hydraulics engineer.
- For new community title scheme land or multi tenancy complexes where business or tenancy occupiers are unknown, the applicant should liaise with Council prior to lodgement of any plumbing application or trade waste approval to confirm Council requirements. Where a common pre-treatment device is permitted, such device must have a minimum capacity of 1000 litres for the discharge of trade waste the subject of one Trade Waste Approval and 500 litres minimum for every subsequent Trade Waste Approval.

## 7.2 CATEGORY 2 WASTE

#### 7.2.1 General

Council may, at is discretion, accept category 2 trade waste into Council's sewerage system at Category 2 trade waste sewer admission limit(s). Additional charges apply for discharge of category 2 trade waste.

Category 2 pre-treatment requirements will be determined on an individual basis. The Approval Holder will be required to employ the services of a Trade Waste Consultant to report on the type, volume and concentrations of trade waste and the methods that will be adopted to ensure Council's sewer admission limits are met. This report will be forwarded to Council as part of the application for approval, prior to any pre-treatment facilities being installed.

Where such an allowance is made, Council may, as a condition imposed on the Trade Waste Approval, require the Approval Holder to undertake an effluent improvement management plan. This plan should include:

- a description of the raw and treated effluent quantity and quality;
- provision for monitoring and reporting waste quantity and quality;
- operating guidelines to at least maintain allowable discharges
- an action program to enhance discharge quality through continuous treatment improvement;
- an examination of waste prevention and recycling options;
- an examination of options for the conservation of water;

• annual reporting to Council, including a summary of achievements and options.

Category 2 trade waste discharges will not be permitted unless all conditions of the approval are satisfied including, where conditioned, the establishment of the effluent improvement management plan.

At the time the Trade Waste Approval falls due for renewal, if Council considers the management plan is not being adequately followed, Council may issue a show cause notice seeking advice from the Approval Holder why Council should renew the approval.

## 8.0 COMMERCIAL SWIMMING POOLS/ORNAMENTAL PONDS

The back wash and pool water from commercial and public swimming pools and ornamental ponds constitute a trade waste and may not be discharged to sewer without approval through the issue of a trade waste approval.

The application for a trade waste approval must include a description of backwashing and pool emptying procedures. These procedures must include details of the anticipated discharge volume, the flow rate and the frequently of discharge.

The Approval Holder will be required to record all backwashing and pool emptying operations as specified above in a log book. The discharge volume may be calculated as the product of the rated capacity of the backwash pump and the term of operation of the pump as recorded in the log book. Records must be forwarded to Councils Trade waste inspector on a monthly basis.

These requirements will be included as a special condition of the approval.

# 9.0 DISCHARGE OF LIQUID WASTES FROM BUSES, AIRCRAFT & VESSELS

The discharge to sewer of certain galley and toilet wastes from recreational vessels may be permitted via approved 'pump out' facilities at Ports and Marinas. The waste discharged from these facilities must meet Sewer Admission Limits as set out in Appendix 2. The operator of such facilities must hold a trade waste approval for discharge. Charges will be in accordance with the category classification.

The discharge of untreated bilge water to the sewer is prohibited due to the possible presence of volatile substances.

The discharge of toilet waste from buses or other recreational vehicles may be permitted at approved discharge locations such as bus or transport depots, terminals, and caravan parks. The Owner/Occupier of the depot, terminal or caravan parks, where such facilities are located must hold a Trade Waste Approval and discharge must be in accordance with the approval conditions. Dumping fees of toilet waste would apply if the toilet waste discharge location is not directly connected to reticulated sewerage.

# **10.0 LANDFILL LEACHATE**

Leachate from landfill sites and wastewater from waste treatment/disposal facilities constitutes a trade waste and may not be discharged to sewer without a trade waste approval.

Trade waste charges in accordance with the discharge category will apply.

# **11.0 DISCHARGE FROM OPEN AREAS**

The discharge of rainwater or stormwater to sewer is prohibited.

The ingress of surface water from a potentially contaminated open area to the sewerage system can cause severe operational problems to Council. However, there may be circumstances when it is environmentally beneficial to accept these wastes to the sewer under strict controls.

A trade waste approval is required to discharge such waste. Controls will be required to ensure the discharge quality and quantity meet the requirements set by this policy and will include:

- all such water is pumped to sewer at a rate acceptable to Council;
- measures to ensure the discharge to sewer ceases automatically after a predetermined level of rainfall volume (mm) and/or intensity (mm/hr);
- measures to collect, segregate and treat the "first flush" volume, equivalent to 10mm X open area (m<sup>2</sup>), during wet weather with additional runoff directed to the storm water system;
- the "first flush" volume collected is pumped to sewer, after any necessary pre-treatment, no sooner than one (1) hour after the cessation of rain;
- a suitable device for the determination of sewer discharge volume to be installed; and
- any additional conditions as applicable.

All conditions will be specified in the approval.

Trade waste charges in accordance with the discharge category will apply.

# **12.0 TRADE WASTE FEES AND CHARGES**

#### **12.1 GENERAL**

Charges to be levied in respect of trade waste for the ensuing financial year will be determined by Council resolution passed at the Budget Meeting in any financial year and listed in the Cassowary Coast Regional Council's approved Revenue Statement.

The trade waste approval annual access charge will be levied prorata on the rates notice with every billing cycle. Other charges relating to trade waste volume and quality, if applicable, will be levied on the rates notice with every billing cycle. Trade waste fees and charges are levied under sections 91(2), 92(4), 94 and 97 of the Local Government Act 2009. The amount levied will be due and payable within 30 days of the date of issue of the notice levying the charge and if not paid within that time will become a debt recoverable by the Council in a manner approved by Council. Any amount remaining unpaid as at the end of the rating period to which the notice relates will bear interest at such rate per centum per annum as fixed by Council by resolution.

## **12.2 PART A ANNUAL ACCESS UTILITY CHARGE**

An annual access utility charge is levied on each Trade Waste Approval associated with a premises and is payable upon receipt of a Council rate notice. The access utility charge covers the cost of administration and compliance management of trade waste approvals and the trade waste services.

The annual access utility charge reflects the management and compliance auditing costs of a low risk trade waste generator with a discharge that poses a low risk of impacting Council's sewerage system. Council reserves the right to charge a higher annual access utility charge if the discharge is perceived as being higher risk and warranting more than 2 compliance audit inspections or any compliance sampling and testing in any 12 month period. If as condition of an approval more than 2 annual audit inspections will be required, any additional inspections will be charged at the fee as indicated in the Fees and Charges Schedule.

### **12.3 CATEGORY 1 VOLUME CHARGES**

For low strength trade waste (Category 1), a trade waste volume charge is applicable and is calculated as follows:

# A) FOR PREMISES WHERE THERE IS NO SEPARATE SUBMETERING FOR TRADE WASTE FACILITIES:

6 Mthly Trade Waste Volume Charge = ((Metered Water Consumption in 6 mths -Pedestal allowance per 6mth x No. of pedestals) x Industry Discharge Factor) x \$rate/kL from Annual Council Revenue Statement

#### Where:

6 months: For a financial year, 6 months is the period 1 July to 31 December, and 1 January to 30 June.

Council adopts a pedestal allowance of 138kL/pedestal/annum or 69kL/pedestal per 6 mths

The industry discharge factor is a fraction between .01 and 1 that indicates the proportion of water used in the non-residential part of the premises that is discharged as trade waste and will vary based on-

- commercial/industry type;
- the site's metering arrangements;
- on-site trade waste generating processes; and
- the mix of occupiers on the land.

Council has compiled a list of discharge factors as listed in table 2 which are largely based on metering information from large water authorities. Alternative mechanisms for calculation of the trade waste volume charge are also endorsed by Council and rely on metering of either water supply to trade waste facilities or effluent.

#### TABLE 2 :INDUSTRY DISCHARGE FACTORS

Industry	Definition	Discharge Factor
Aged care/nursing home	Nursing home, hostel, respite, hospice	0.80
Animal care	Veterinary, boarding kennels	0.70
Automotive	Mechanical workshop, garage, lawnmower repair, equipment hire, etc.	0.90
Bakeries	Bakery (small or large)	0.85
Boiler making/engineering	Sheet metal, steel fabrication,	0.90
Bowling club	Bowls club	0.70
Butchers	Butchers, small goods manufacturers	0.90
Car detailing	Car detailing	0.90
Caravan park	Caravan park, mobile home park	0.70
Chemical manufacturers	Manufacturing of chemicals	0.90
Chicken poultry shop	Chicken shop-no cooking	0.90
Chicken poultry shop	Chicken shop - cooking	0.80
Child care	Kindergartens, day care, child care centre	0.80
Churches/halls	Churches and community halls	0.90
Concrete batching plants	Concrete plants	0.02
Dental	Dental surgery	0.80
Factories (dry processing)	Manufacturing without water	0.70
Fast food (with disposable cutlery and plates)	KFC, McDonalds, Pizza, etc.	0.80

Industry	Definition	Discharge Factor
Food processor	Salad and vegetables	0.85
Golf clubs	Private and public golf club	0.90
Guesthouse/boarding house	Backpackers accommodation, boarding house	0.80
Hairdresser	Hairdresser/beauty salon	0.90
Hospitals	Hospitals private and public	0.90
Hotels	Licenced hotel premises/taverns	0.90
Laundries	Commercial laundries/drycleaners and Laundromats	0.85
Marinas	Marina complex, boat manufactures	0.90
Medical centre	Medical centre with x-ray	0.80
Mixed industries	Anything not covered by specific categories or multiple industries	0.90
Motels	Accommodation	0.90
Nurseries/agriculture	Whole and retail nurseries and agricultural business	0.10
Office blocks	Premises used for offices	0.90
Parks and gardens	Council parks and gardens	0.10
Radiator repair	Radiator repair	0.70
Railway	Railway stations	0.90
Registered clubs	RSL, sporting clubs excluding Bowls and golf clubs	0.90

Industry	Definition	Discharge Factor
Restaurants and cafes	Restaurants, cafes, take-a-ways, etc.(See also fast food)	0.90
Schools/Universities	Private and public education	0.80
Seafood	Wholesale, retail seafood processors, bait and fisheries	0.90
Service stations/car washes	Petrol stations, carwashes	0.90
Shopping centres	Shopping centre complexes (large or small)	0.90
Swimming pool	Swimming pool complex	0.70
Utility	Power, telephone, etc.	0.90
Vacant land	Vacant land	0
Waste recovery	Liquid waste disposal	0.90

Where individual Approval Holders have information which would indicate a departure from the above discharge factor, application may be made for reconsideration of the fraction used.

The following examples demonstrate the methodology for calculation of the category 1 trade waste volumetric charge.

Example 1: Restaurant on individual lot and not in a Body Corporate

6 Mth water consumption = 500 kilolitres

Pedestals = 5

Pedestal Allowance = 69 kilolitres/pedestal/6 mth

Trade Waste Discharge Factor = 0.90

Step 1 – calculate the pedestal allowance volume

5 toilets x 69 kilolitres per pedestal per 6mth = 345 kilolitres per 6mth.

Step 2 – deduct the pedestal allowance from the water consumption for the billing period

500 kilolitres – 345 kilolitres = 155 kilolitres.

Step 3 – multiply the 'non-domestic' water in Step 2 by the discharge factor

155 kilolitres x 0.9 = 139.5 kilolitres

Trade waste volume for the billing period is 139.5 kilolitres.

<u>Step 4 – Multiply the Trade waste volume x **\$X/kL** - the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement)</u>

139.5 kilolitres x \$X per kilolitre = \$Y (amount to be levied on rates notice.)

EXAMPLE 2: Restaurant on an individual lot within a community title scheme land which has a bulk supply water meter for the entire scheme land and no water sub-meter or trade waste effluent discharge meter servicing the individual lot, and pedestals are on the common property. In this instance the restaurant is the sole trade waste generator in the CTS.

6 Mth water consumption = 500 kilolitres

Pedestals = 5

Pedestal Allowance = 69 kilolitres/pedestal/6 mth

Trade Waste Discharge Factor = 0.90

Step 1 – calculate the pedestal allowance volume

5 toilets x 69 kilolitres per pedestal per 6mth = 345 kilolitres per 6mth.

Step 2 – deduct the pedestal allowance from the water consumption for the billing period

500 kilolitres – 345 kilolitres = 155 kilolitres.

Step 3 – multiply the 'non-domestic' water in Step 2 by the discharge factor

155 kilolitres x 0.9 = 139.5 kilolitres

Trade waste volume for the billing period is 139.5 kilolitres.

<u>Step 4 – Multiply the Trade waste volume x **\$X/kL -** the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement)</u>

139.5 kilolitres x \$X per kilolitre = \$Y (amount to be levied on rates notice.)

EXAMPLE 3: Restaurant and bakery each on an individual lot within a community title scheme land which has a bulk supply water meter for the entire scheme land and no water sub-meter or trade waste effluent discharge meter servicing the individual lot, and pedestals are on the common property. 6 Mth water consumption for CTS = 900 kilolitres Pedestals = 5Pedestal Allowance = 69 kilolitres/pedestal/6 mth Trade Waste Discharge Factor = 0.90 for restaurant. Trade Waste Discharge Factor = 0.85 for bakery Step 1 – calculate the pedestal allowance volume 5 toilets x 69 kilolitres per pedestal per 6mth = 345 kilolitres per 6mth. Step 2 - deduct the pedestal allowance from the water consumption for the billing period 900 kilolitres – 345 kilolitres = 555 kilolitres Step 3 – Assess Trade Waste Discharge Volume for CTS Trade Waste Discharge Volume = Volume from Step 2 \* Lowest Discharge Factor Applying within CTS 555 kilolitres x 0.85 = 471.75 kilolitres Trade waste discharge volume for CTS = 471.75 kilolitres. (A) Step 4 – Apportion CTS Discharge Volume Based on Lot Size of Each Trade Waste Lot Lot area of restaurant = 1200m2 (B) Lot area of bakery = 200m2 (C) Trade Waste Discharge Volume of Bakery = A\*C/(B+C) = 471.75\*200/1400 = 67.39 kL Trade Waste Discharge Volume of Restaurant =  $A^*B/(B+C) = 471.75^*1200/1400 = 404.36$  kL Step 5 – Multiply the Trade waste discharge volume x \$X/kL - the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement) For bakery = 67.39 kilolitres x X per kilolitre = Y (amount to be levied on rates notice.)

For restaurant = 404.36 kilolitres x **\$X** per kilolitre = **\$Z** (amount to be levied on rates notice.)

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Example 4: Restaurant on an individual lot in a Body Corporate with individual lot submetering of water consumption. Toilet facilities of restaurant on individual lot.

6 Mth water consumption = 500 kilolitres

Pedestals = 5

Pedestal Allowance = 69 kilolitres/pedestal/6 mth

Trade Waste Discharge Factor = 0.90

Step 1 – calculate the pedestal allowance volume

5 toilets x 69 kilolitres per pedestal per 6mth = 345 kilolitres per 6mth.

Step 2 - deduct the pedestal allowance from the water consumption for the billing period

500 kilolitres – 345 kilolitres = 155 kilolitres.

Step 3 – multiply the 'non-domestic' water in Step 2 by the discharge factor

155 kilolitres x 0.9 = 139.5 kilolitres

Trade waste volume for the billing period is 139.5 kilolitres.

<u>Step 4 – Multiply the Trade waste volume x **\$X/kL** - the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement)</u>

139.5 kilolitres x \$X per kilolitre = \$Y (amount to be levied on rates notice.)

# Example 5: Restaurant on individual lot in a Body Corporate with Individual Lot SubMetering Of Water Consumption. Toilet Facilities on Common Property.

6 Mth water consumption = 500 kilolitres

No Pedestal Allowance

Trade Waste Discharge Factor = 0.90

**Step 1 -** Calculate the Trade waste discharge volume = water consumption by the discharge factor

500 kilolitres x 0.9 = 450 kilolitres

Trade waste volume for the billing period is 450 kilolitres.

<u>Step 2 – Multiply the Trade waste volume x **\$X/kL** - the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement)</u>

450 kilolitres x **\$X** per kilolitre = **\$Y** (amount to be levied on rates notice.)

EXAMPLE 6: Restaurant and bakery on a lease within a larger complex on a single lot. No other leased properties within the lot are trade waste business.
6 Mth water consumption for lot = 900 kilolitres
Pedestals = 5 shared in complex.
Pedestal Allowance = 69 kilolitres/pedestal/6 mth
Trade Waste Discharge Factor = 0.90 for restaurant.
Trade Waste Discharge Factor = 0.85 for bakery
Step 1 – calculate the pedestal allowance volume
5 toilets x 69 kilolitres per pedestal per 6mth = 345 kilolitres per 6mth.
Step 2 – deduct the pedestal allowance from the water consumption for the billing period
900 kilolitres – 345 kilolitres = 555 kilolitres
Step 3 – Assess Trade Waste Discharge Volume for complex (the lot)
Trade Waste Discharge Volume = Volume from Step 2 * Lowest Discharge Factor Applying within the lot
555 kilolitres x 0.85 = 471.75 kilolitres
Trade waste discharge volume for lot = $471.75$ kilolitres. (A)
Step 4 – Apportion Lot Discharge Volume Based on Floor Area of Each Trade Waste Lot
Floor area of restaurant = 800m2 (B)
Lot area of bakery = 200m2 (C)
Trade Waste Discharge Volume of Bakery = $A*C/(B+C)$ = 471.75*200/1000 = 94.35 kL
Trade Waste Discharge Volume of Restaurant = $A^*B/(B+C)$ = 471.75*800/1000 = 377.40 kL
<u>Step 5 – Multiply the Trade waste discharge volume x <b>\$X/kL</b> - the trade waste volumetric charge dollar value per kilolitre (from Revenue Statement)</u>
For bakery = 94.35 kilolitres x $X$ per kilolitre = $Y$ (amount to be levied on rates notice.)

For restaurant = 377.40 kilolitres x **\$X** per kilolitre = **\$Z** (amount to be levied on rates notice.)

# B) FOR PREMISES WHERE THERE IS SEPARATE SUBMETERING INSTALLED ON TRADE WASTE FACILITIES:

The trade waste volumes recorded by submeters on trade waste fixtures will be used directly in the calculation for the volumetric charge and no offset will be granted for the pedestal allowance or the industry discharge factor.

# 6 Mthly Trade Waste Volume Charge = 6 Mth Submetered trade waste volume \* trade waste volumetric \$rate/kL from Annual Council Revenue Statement

## **12.4 CATEGORY 2 TRADE WASTE VOLUME AND QUALITY CHARGE**

The category 2 quantity and quality charge on the total annual discharge of trade waste to the sewer will be assessed on an individual case by case situation depending on the nature and strength of the waste discharged to Council's sewerage network. The charging formula will be issued with the conditions of any Approval.

For category 2 Approval Holders, it will be mandatory to install an effluent meter to measure the trade waste volume being discharged to the sewerage system. The discharge volume in the above formula will be the metered effluent volume. Human waste flows must be separated from trade waste and discharged separately to the sewer for category 2 Approval Holders.

For charging purposes, a system of self-monitoring by the Approval Holder will be used to collect sufficient data to enable the average mass load for the designated charging period to be calculated. Where pre-treatment is required to meet sewer admission limits for specified parameters, self-monitoring will be required for those parameters, or a suitable surrogate, to confirm satisfactory pre-treatment. Requirements for self-monitoring and auditing by Council will be specified in the approval. The Approval Holder will meet all costs of self-monitoring. All laboratory analyses will be performed by NATA registered laboratories.

Council will collect and analyse samples for overall assessment of compliance with Sewer Admission Limits. The anticipated cost of compliance sampling and testing will be included in the levied amount for the annual access utility charge.

Where additional inspection and testing is required to be done by Council as a result of non-compliance, Council will charge the Approval Holder for all costs associated with this inspection and testing as outlined in Council's Schedule of Fees and Charges.

## **12.5 MISCELLANEOUS CHARGES**

Additional charges are outlined in the Revenue Statement and fees and charges schedule covering a range of other miscellaneous trade waste matters as outlined below:

- Sewer Loading Charge Illegal Discharge eg. Failure to install appropriate pre-treatment devices or illegal discharge to sewer.
- Sewer Loading Charge Non servicing of pre-treatment devices that lead to a discharge that exceeds the Council's sewer discharge limits.
- Sewer Loading Charge non installation of pre-treatment facility where an existing waste stream requires the installation of an arrestor to provide best practice pre-treatment for category 1 and category 2 wastes, but Council agrees that site specific conditions do not allow for appropriate device to be installed.
- Sewer Loading Charge undersized pre-treatment facility
- Charges for Food Waste Disposal Units Approval Holders in category 1 with food waste disposal units (garbage grinders, fruit & vegetable peelers) will be charged a fee based on the power of the motor. This charge is an addition to other applicable trade waste charges:
  - Category A: To 700W rating
  - Category B: Above 700W rating
  - Category C: Garbage grinders in public and private hospitals and aged nursing homes
- Inspection fees The annual access utility charge is based on a maximum of 2 compliance audits per annum. In the consideration of an application for a trade waste approval, Council will assess if the trade

waste is considered high risk with increased potential to damage Council's system. If assessed as high risk Council may condition, as part of the approval conditions, further audit inspections be undertaken and in this instance, additional inspection fees will be payable with the annual access utility charge.

- Noncompliance with trade waste approval conditions may also incurr a requirement for additional inspections.
- Testing fees the waste stream of a category 2 discharger will be audited by sampling and testing on a basis as outlined in the approval conditions. These tests are over and above the testing undertaken by the Approval Holder to monitor the performance of the pre-treatment device. The full cost of laboratory analyses will be recovered from the Approval Holder.
- Where Council agrees to accept a trade waste which has properties in excess of those defined in the General Limits in Appendix 2 of the Sewer Admission Limits, an additional charge will apply for each agreed non-complying parameter. The formula for calculation will be:

Charge = (actual/approved)<sup>d</sup> x charge rate (\$/kg) x kg pollutant

where d is a constant to be determined by Council;

the minimum ratio for (actual/approved) is 1.0; and

'approved' means the sewer admission limit value or other negotiated value defined in the trade waste approval.

'actual' is the average of the actual waste that is discharged over that period.

The period of the charge will be the time period, based on the sampling frequency, over which the limits are considered to have been exceeded.

• Septage and Other Liquid Waste fees - Licensed waste transporters disposing of septage, portable toilet or other approved liquid waste to the sewer under approved conditions will be charged on a calculated volume basis (\$/kL) which takes account of both the volume and strength of the waste.

#### **12.6 REFUNDS ON FEES AND CHARGES FOR CESSATION**

No refunds of any fees or charges will be paid on cessation of discharge.

# **13.0 INSPECTIONS AND AUDITING**

#### **13.1 GENERAL**

Council undertakes an inspection and auditing program to ensure compliance with this management plan and trade waste approvals. The range of inspections by Council include:

- Initial inspections
- · Routine compliance inspections
- Follow Up Inspection
- Investigation Inspection
- Customer Request Inspection

### **13.2 INITIAL INSPECTIONS**

Initial inspections are performed prior to, or just after, the submission of a liquid trade waste application and ideally before any liquid trade waste is discharged to the sewerage system from the site. They are often used to assist applicants complete the trade waste application form.

Depending on the type of business, this inspection may consider;

- type of business/es to be conducted on the site;
- source points for the generation of liquid trade waste;
- · proposed quantity and quality of the liquid trade waste to be discharged;
- · proposed start date for the commencement of liquid trade waste discharge to sewer; and
- pre-treatment installed or proposed.

#### **13.3 ROUTINE COMPLIANCE INSPECTIONS**

For the purpose of monitoring and auditing the conditions of discharge, Council's trade waste officer will inspect the premises of all Approval Holders' premises to check:

- That pre-treatment facilities and diversion valves are regularly and properly serviced and standby equipment is available where necessary;
- · All storage areas are properly isolated and are not improperly connected to sewer;
- There are no unauthorised trade waste connections to sewer;
- There are no illegal stormwater connections to the trade waste system or sewerage;
- There are no illegal trade waste connections to stormwater and that there is no potential for trade waste to flow improperly to sewer, stormwater or waterways;
- That conditions of the trade waste approval, such as monitoring requirements, are being adhered to;
- · Calibration records of any monitoring equipment.

These inspections also enable Council's trade waste officers to take compliance samples, establish if the service frequency for pre-treatment equipment is adequate, assess the overall condition of the pre-treatment device, assess the waste reduction techniques employed and to provide general advice on trade waste management.

#### **13.4 FOLLOW UP INSPECTIONS**

Follow up inspections are required where incidents or breaches have occurred during a previous inspection site visit. The re-inspection may ascertain that:

- · the incident of non-compliance has been rectified;
- procedures have been initiated to prevent re-occurrence;
- · steps have been taken to modify the pre-treatment;
- steps in an Effluent Improvement Program have been completed; or
- no action has been taken to rectify the cause of the incident or breach, in which case further compliance action may be undertaken, including suspension or cancellation of the trade waste approval.

### **13.5 INVESTIGATION INSPECTION**

Investigation inspections are performed predominantly on a reactive basis following:

- a complaint from an external source; or
- identification of an illegal discharge entering the sewerage system or treatment plant.

The purpose of these inspections is to track down and stop the source of the unauthorised discharge. The person responsible for the discharge may be charged a fee for repairs to any damage to the sewerage system caused as a result of the non-compliant discharge.

#### **13.6 CUSTOMER REQUEST INSPECTION**

A trade waste customer may request an additional inspection from Council for the purposes of assessing some component of their trade waste activity, such as the pre-treatment service frequency.

#### **13.7 COST OF INSPECTIONS**

Council may at it's discretion, invoice the Approval Holder for any inspections not otherwise covered in the application fee or the annual access utility charge.

# 14.0 INSPECTION CHAMBERS AND/OR GAUGING FACILITY

Category 2 wastes will be discharged to Council's sewerage system via an open channel inspection chamber and/or gauging facility. The inspection chamber and/or gauging facility will be located on the trade waste discharge line in an area which is accessible at all times to Council's officers thus allowing for sampling and/or monitoring equipment to be installed and operated.

A suitable 240 volt power outlet and a standard water supply outlet with back-flow prevention device installed in accordance with AS 3500 Part 1 and As 2845.3 and approved by Council is required at all gauging facility sites.

For new Category 2 installations (and where reasonably practical for new category 1 installations), the trade waste discharge line must be separate from the domestic waste discharge line. For existing installations retrofitting is not required except where it may be completed during any proposed upgrading or alterations to the installation.

Where a non-domestic premise does not have a separate trade waste discharge line to Council's sewerage system, an open channel inspection chamber must be installed on the house drain, in an accessible location, prior to leaving the property and/or connecting into the Council sewer.

Arrestor trap installations and other pre-treatment devices on premises discharging Category 1 wastes, must have an inspection opening provided externally to the building, within the premises, at finished ground level.

# **15.0 TRADE WASTE METERING**

#### **15.1 METERING OF NEW TRADE WASTE APPLICATIONS**

Persons submitting new applications for category 1 trade waste with water consumptions likely to be in excess of 1ML per annum will be conditioned to install an approved flow submeter/s on the inlet to each trade waste fixture. Alternatively Council may approve an effluent meter prior to the connection to Council's sewerage system where a flow meter installation is not practical.

Persons submitting new applications for category 2 trade waste will be conditioned to install an effluent meter in a chamber immediately prior to the connection to Council's sewerage system. For new category 2 dischargers the domestic waste stream must be in a separate piped system from the trade waste flow stream, so the effluent metering will only measure the trade waste volume used for calculation of charging.

## **15.2 METERING UNDER EXISTING TRADE WASTE APPROVALS**

For existing high volume category 1 Trade Waste Approvals, the Approval Holders are encouraged to install approved flow submeters on the inlet to each trade waste fixture. Where an Approval Holder requests the installation of trade waste submetering, and the proposal and associated plumbing application is accepted by Council, the Approval Holder may either undertake the work privately at his cost or engage Council to undertake the work by way of a private works agreement. If the former option is adopted, meters will be provided by Council at cost and the work must be done by a plumber or drainer in accordance with an approved plumbing application. If the latter option is undertaken, the Approval Holder will still be responsible for preparation of the plumbing application but Council plumbing staff will undertake the work on the basis of a fixed price quotation and the full amount received prior to commencement of works. Trade waste submeters or effluent meters approved by Council will become the property of Council who will be responsible to maintain the meters. Maintenance of pipework in private property other than the meter will be responsibility of the owner. Where the Approval Holder is not the owner of the premises, the Approval Holder must obtain the written authority of the Owner to such installation specifically noting agreement to the conditions with respect to maintenance responsibilities as outlined herein.

## **15.4 EFFLUENT METERING OPTION**

In some circumstances, an option may be approved where an effluent meter could be installed immediately prior to the connection to Council's sewerage system. If such arrangement is approved, details of the effluent meter installation and pit will be confirmed by Council. As with the submetering option, the installation could be undertaken by the Approval Holder or by Council. The terms and conditions for installation and repayment of this option would be the same as for submetering.

Where an effluent meter is installed, and the pipe flow is the combination of the domestic waste stream and the trade waste flow, the trade waste volume for charging would be calculated as follows:

Trade waste volume for 6 mths = Effluent Metered Volume (in 6 mths) – 69kL x no.of pedestals.

## **15.5 METER REQUIREMENTS AND DETAILS**

As noted above, trade waste submeters will be supplied by Council at the scheduled cost. Effluent meters will not be supplied by Council, unless the installation is undertaken by Council. Tradewaste meters used for trade or billing purposes by private entities and wastewater service providers must comply with the requirements of the national Measurement Act 1960 (Cth) (the Act), National Measurement Regulations 1999 (Cth) and the National Trade Measurement Regulations 2009 (Cth).

Meters must be able to retain their readings following a power failure. The meter must have an alternative power back-up. The meter installation will include a tamper proof mechanism to prevent unlawful interference with the meter. If evidence arises that metering is being bypassed or otherwise rendered ineffective in any manner, the trade waste volume will be assessed using the industry discharge factor method. Tradewaste meters must be installed in an accessible position and no submeters must be higher than 1.8 meters from floor/ground level. Tradewaste submeters must not be enclosed.

In order to be verified and calibrated, a tradewaste meter is required to be tested in accordance with the National Instrument Test Procedure for Utility Meters NIPT 14. Verification can only be performed by a Utility Meter Verifier under the Act. Calibration requirements including the frequency of calibration will be indicated in approval conditions.

# 16.0 REMOVAL OF INDUSTRIAL LIQUID WASTE FROM PREMISES

#### **16.1 LIQUID WASTE DISPOSAL CONTRACTORS**

Removal of scheduled liquid wastes from a premises must only be carried out by a waste transporter licensed in accordance with the *Environmental Protection Act 1994 and Environmental Protection Regulation* 2008 and transported, stored, treated or disposed of in accordance with the requirements of the *Environmental Protection (Waste Management) Regulation 2000.* 

Liquid waste disposal contractors wishing to discharge septage, portable toilet waste or other approved holding tank or liquid waste to the sewer or sewage treatment plant must be registered annually with Council and pay all charges for disposal. Application for registration as a liquid waste disposal contractor must be lodged on the prescribed form and must be accompanied with payment of the annual fee. Council may assign conditions to any approval issued to a liquid waste disposal contractor.

## **16.2 COLLECTION AND DISPOSAL OF LIQUID WASTES**

No person will discharge or cause to be discharged directly or indirectly to the sewer, wastes from any liquid transport vehicle without Council approval through the issue of a trade waste approval.

Waste transporters must dispose of septage and/or other approved liquid waste into the sewerage system in accordance with their approval conditions. Trade waste charges apply for the disposal of septage and liquid waste as indicated in Council's Schedule of Fees and Charges.

Grease interceptor waste and oil interceptor waste other than treated effluent from approved installations must not be disposed of to the sewerage system. Such wastes must be disposed of in a manner and/or at a site approved in accordance with requirements of the Environmental Protection Act and the Environmental Protection Regulation 2008 and operated in accordance with the requirements of the Environmental Protection (Waste Management) Regulation 2000.

Advice on the disposal of liquid waste which is not suitable for discharge to sewer may be obtained from Council's Trade Waste Officer.

# **17.0 APPROVED SERVICE CONTRACTORS**

Council has a list of approved service contractors for cleaning and servicing of pre-treatment and stormwater diversion equipment.

To be on the approved list, service contractors are required to commit to:

- Servicing pre-treatment or stormwater diversion devices to council requirements;
- Assessing each pre-device for damage (e.g. broken baffles) and maintenance requirements;
- Advising council if, in their opinion, the specified service frequency is inappropriate;
- Providing to council, monthly and in electronic form, details of devices serviced, including date of service, council barcode number and maintenance requirements.

Other service providers may be used. However Council may require a Trade Waste Officer to inspect the device immediately after servicing, at the Approval Holder's expense.

Maintenance cleaning of arrestors must be carried out on a regular basis in accordance with conditions of the trade waste approval by a waste transporter licensed under the Environmental Protection Act 1994 and the Environmental Protection Regulation 2008.

# **18.0 RECORDS AND TRADE WASTE INFORMATION**

Council will maintain records of trade waste data, management documents and customer correspondence within its corporate record systems.

Information and data relating to a specific Approval Holder, obtained from reports, applications, approvals, monitoring programs will not be available to the public and are treated as commercial-in-confidence information.

# **19.0 TWEMP REVISION**

This TWEMP will be subject to review on an annual basis or as circumstances require. The updated version of the TWEMP will be available on Council's website.

# APPENDIX 1- SELECTED LEGISLATION RELATIVE TO TRADE WASTE

Water Supply (Safety and Reliability) Act 2008
Plumbing and Drainage Act 2002
Standard Plumbing and Drainage Regulation 2003
Environmental Protection Act 1994
Environmental Protection (Water) Policy 2009
Environmental Protection Regulation 2007
Environmental Protection (Waste Management) Policy 2000 (Repealed 2011)
Environmental Protection (Waste Management) Regulation 2000
Local Government Act 2009
Sustainable Planning Act 2009 replaces the Integrated Planning Act 1997
Sustainable Planning Regulation 2009
Radiation Safety Act 1999
Radiation Safety Regulation 2010
Gene Technology Act 2001 (Queensland Legislation)
Gene Technology Act 2000 (Commonwealth Legislation)

# **APPENDIX 2 - SEWER ADMISSION LIMITS**

## A2-1 PURPOSE AND SCOPE

These trade waste sewer acceptance criteria define the quality standards for trade waste approved for discharge into sewerage infrastructure owned by the Council.

Site-specific variations to the trade waste sewer acceptance criteria may be approved at Council's sole discretion and such variations will be documented in *Trade Waste Approval* conditions.

These trade waste sewer acceptance criteria conform to the Australian Sewage Quality Management Guideline 2012 (WSAA) and the requirements of the *Water Supply (Safety and Reliability) Act* 2008.

## **A2-2 PROHIBITED SUBSTANCES**

Persons, including Approval Holders, are prohibited from introducing or cause to be introduced into Council's sewerage infrastructure, any prohibited substances listed in trade waste sewer acceptance criteria.

Prohibited substances are detailed in Schedule 1 of the Water Supply Act, and include:

• A solid or viscous substance in a quantity, or of a size, that can obstruct sewage, or interfere with the operation of sewerage.

Note: specifically including:

- Solid or viscous substances in amounts which will cause obstruction of the flow in Council's sewerage infrastructure resulting in interference; but in no case solids with a maximum linear dimension of greater than 13 millimetres and a quiescent settling velocity greater than 3 metres per hour.
- Animal guts or tissues, paunch manure, bones, hair, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dusts, sawdust, metal, glass, straw, grass clippings, rags, spent grains, waste paper, wood and plastics.

#### • A flammable or explosive solid, liquid or gaseous substance, including petrol

Note: specifically including:

 Contaminants which create a fire or explosive hazard in sewerage infrastructure including, but not limited to, waste streams with a closed-cup flashpoint of less than 60°C.

#### • Floodwater, rainwater, roof water, storm water, subsoil water and surface water.

Note: Where rainwater is collected and used in substitute for potable water and then used to generate trade waste, the waste water will no longer be considered to be rainwater or groundwater.

- A substance, that given its quantity, is capable alone, or by interaction with another substance discharged into sewerage, of:
  - inhibiting or interfering with a sewage treatment process; or
  - causing damage or a hazard to sewerage; or
  - causing a hazard for humans or animals; or
  - creating a public nuisance; or
  - creating a hazard in waters into which it is discharged; or
  - contaminating the environment in places where effluent or sludge from a sewage treatment plant is discharged or reused.

Note: specifically including:

- Noxious or malodorous liquids, gases, solids, or other wastewater.
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference (i.e. accumulation in a pump station wet well) or pass through.
- Alkaline degreasers or other products intended for the use of solubilising or emulsifying oil, grease and fat residues.
- Raw or depleted degreasing substances or baths of detergent cleaners, hydrocarbon cleansers, caustic soda, phenol/cresol solutions, cresylic acid and chlorinated hydrocarbons.
- Contaminants which result in the release of toxic gases, vapours, or fumes within sewerage infrastructure in a quantity that may cause worker health and safety problems.
- Any sludge, screenings, or other residual wastes from the pre-treatment of industrial or commercial wastes or from industrial or commercial processes, unless such wastes have undergone pretreatment and have been approved for discharge by Council.

#### • A substance at a temperature of more than 38°C

#### A2-3 RESTRICTED SUBSTANCES

All persons, including Approval Holders, are prohibited from introducing or causing to be introduced into Council's sewerage infrastructure any restricted substance at concentration or mass load greater than the relevant sewer acceptance criteria listed in the tables below.

Any substance not listed in the sewer acceptance criteria is a restricted discharge and must not be discharged at measurable concentrations unless specifically approved by Council.

## **A2-3 RESTRICTED SUBSTANCES**

PARAMETER	REMARKS
Medical and infectious wastes	Pathological, infectious and cytotoxic wastes are prohibited except as allowed for under the <i>National Guidelines for the Management of Clinical and Related Wastes</i> produced by the National Health and Medical Research Council 1988. No person will discharge solid wastes from any hospital, clinic, surgery, laboratory or any other medical or veterinary facility to the sewers including but not limited to hypodermic needles, syringes, instruments, utensils, swabs, dressings, bandages, paper and plastic items of a disposable nature and any noticeable portion of human or animal anatomy.
Genetically engineered organisms	Dischargers must notify and obtain the written permission of Council prior to the discharge of genetically engineered organisms. Council, if not already in receipt of information from the Office of the Gene Technology Regulator (OGTR) about this application will refer the application to OGTR for comment. Laboratories and other facilities which culture, package or transport GMOs should have in place sufficient procedures and pre-treatment equipment to ensure that no live GMOs are discharged to sewerage. OGTR has issued guidelines on the disposal of genetically engineered organisms. For further information contact: Office of the Gene Technology Regulator MDP54 GPO Box 9848 Canberra ACT 2601 Email: <u>ogtr@health.gov.au</u> Phone: 1800 181 030 Fax: (02) 6271 4202
Halogenated Aromatic Hydrocarbons (PCBs and PBBs)	Because of their stability, persistence and ability to bioaccumulate in animal tissue, these compounds have been severely restricted by health and environmental regulators. The discharge must be less than the limit of detection.
Pesticides – organochlorine	Because of their stability, persistence and ability to bioaccumulate in animal tissue, these compounds have been severely restricted by health and environmental regulators. The discharge must be less than the limit of detection.
Radioactive material	Radioactive material discharged to sewer must comply with requirements and discharge standards specified in the <i>Radiation Safety Act 1999</i> and associated regulations as updated from time to time.
Other substances	Other substances to be controlled in discharges to sewer are those which:
	are persistent and/or toxic
	<ul> <li>pass through a treatment plant untreated or partially treated and affect the receiving environment</li> </ul>
	are deleterious to the sewerage system, employees of Council and/or the public
	<ul> <li>inhibit process efficiency or make collection and treatment of wastewater more expensive</li> </ul>
	could lead to contamination of the wastewater treatment products.

### **A2-4 ADMISSION LIMITS**

The upper limits for the quality of trade waste discharged to the sewer for all categories are set out below. These admission limits will apply immediately. They are subject to periodic review.

#### I. GENERAL LIMITS

Parameter	Concentration (mg/l except *)
Temperature *	< 38°C
рН *	6 – 10
Biochemical Oxygen Demand (BOD <sub>5</sub> ) +	600mg/L
Chemical Oxygen Demand (COD) +	1200mg/L
Total Organic Carbon (TOC) +	1200mg/L
Suspended Solids +	600mg/L
Total dissolved solids (TDS) <sup>+</sup>	4000mg/L
Total oil/grease (Freon extractable)	200
Gross solids *	non faecal gross solids will have a maximum linear dimension of less than 20mm and a quiescent settling rate of less than 3m/hr.
Colour *	limited such as not to give any discernible colour in treatment works discharge
Odour *	not detectable in 1% dilution or causing an odour problem in Council's sewerage system
Chlorine (as Cl <sub>2</sub> )	10
Sulphate ( as SO4 <sup></sup> ) <sup>#</sup>	2000
Sulphite ( as SO <sub>2</sub> )	100
Surfactants - Anionic (MBAS)	500
Aluminium (as Al) <sup>#</sup>	100

Parameter	Concentration (mg/l except *)
Iron (as Fe)#	100
Ammonia plus ammonium ion (as N)#	100
Total Kjeldahl Nitrogen (as N) <sup>#</sup>	150
Phosphorus (Total P) <sup>#</sup>	50
Manganese (as Mn)	100

+ these levels () are for guidance only; the total mass load and the capacity of the sewerage system to accept the load will be considered for each application.

# Council may in some circumstances accept waste containing higher concentrations of these substances. Additional charges for treatment (clause 7.6) will apply.

### II. SPECIFIC LIMITS - INORGANIC

Parameter	Concentration mg/l
Boron (B)	100
Bromine (Br <sub>2</sub> )	10
Fluoride (F <sup>-</sup> )	30
Cyanide (CN <sup>-</sup> )	5
Sulphide (S <sup></sup> )	5

#### III. SPECIFIC LIMITS - METALS

Parameter	Maximum Concentration (mg/l)	Daily mass load (g/day)
Arsenic (As)	5	15
Cadmium (Cd)	2	6
Chromium (Cr)		
Total	20	75*
Hexavalent	10	
Cobalt (Co)	10	30
Copper (Cu)	10	75
manganese (Mn)	10	30
Lead (Pb)	10	30
Mercury (Hg)	0.05	0.15
Nickel (Ni)	10	30
Selenium (Se)	5	15
Silver (Ag)	5	15
Tin (Sn)	10	30
Zinc (Zn)	10	75

The concentration values apply to dischargers having a daily mass load between the Lower Daily Mass Load (LDML) and the Upper Daily Mass Load (UDML). For small dischargers with a daily mass load below the LDML, no concentration limits apply. Dischargers who exceed Council's UDML limits will be required to take measures to meet the UDML. This may involve treating to a lower concentration than indicated above.

\* For discharges below the Lower Daily Mass Load, hexavalent Cr must be reduced to trivalent Cr.

#### IV. SPECIFIC LIMITS - ORGANIC

Specific Acceptance Limits for Organic Compounds

PARAMETER	MAXIMUM LIMIT	REMARKS	
Aldehydes		Aldehydes in the sewer atmosphere can adversely affect the	
Formaldehyde (as HCHO)	30 mg/L	safety of operations and maintenance personnel.	
Acetaldehyde (as CH <sub>3</sub> CHO)	5 mg/L		
Propionaldehyde (as CH <sub>3</sub> CH <sub>2</sub> CH0)	5 mg/L		
Dimethyl sulphide	1 mg/L	Dimethyl sulphide is flammable and an irritant. Dimethyl sulphide has an unpleasant odour at even extremely low concentrations.	
Ketones		Ketones in the sewer atmosphere can adversely affect the safety	
Acetone	400 mg/L	of operations and maintenance personnel.	
Methyl ethyl ketone	100 mg/L		
<b>Pesticides</b> – total (includes insecticides, herbicides, fungicides)	1.0 mg/L	<ul> <li>This category covers all pesticides other than those that are specifically listed below. They may:</li> <li>adversely affect the treatment processes</li> <li>impair the quality of the receiving environment</li> <li>adversely affect the safety of operations and maintenance personnel</li> <li>restrict reuse/recycling applications.</li> </ul>	
Pesticides – organophosphor-ous (total)	0.1 mg/L	<ul> <li>Including: azinphos-methyl; azinphos-ethyl; coumaphos; demeton; dichlorvos; dimethoate; disulfoton; fenitrothion; fenthion; malathion; methamidophos; mevinphos; omethoate; oxydemeton-methyl; parathion; triazophos; trichlofon</li> <li>Other organophosphate pesticides are covered by the preceding <i>Pesticides (General)</i> category.</li> <li>This list includes substances on the following lists of environmental toxicants: <ul> <li>UK Red List</li> <li>EC Priority Hazard List, and</li> <li>North Sea Agreement, APP. ID.</li> </ul> </li> </ul>	
Petroleum hydrocarbons		Petroleum hydrocarbons may adversely affect the safety of operations and maintenance personnel.	
Total	30 mg/L		
C <sub>6</sub> _C <sub>9</sub>	5 mg/L		
Benzene	0.04 mg/L		
Toluene	0.5 mg/L		
Ethyl benzene	1.0 mg/L		
Xylene (total)	1.0 mg/L		
Phenolic compounds		Phenolic compounds may adversely affect biological treatment	
Total Phenols	100 mg/L	processes. They may not be completely removed by convention treatment and subsequently may impact on the receiving environment.	
Pentachlorophenol	5 mg/L	<ul> <li>Pentachlorophenol:</li> <li>can adversely affect the biological treatment process</li> <li>may impair the quality of the receiving environment.</li> </ul>	
Polynuclear Aromatic Hydrocarbons (PAHs)	5 mg/L	Many of these substances have been demonstrated to have an adverse effect on the health of animals. Some are also persistent and are not degraded by conventional treatment processes.	

PARAMETER	MAXIMUM LIMIT	REMARKS
Volatile organic compounds		Volatile organic compounds may adversely affect the safety of operations and maintenance personnel.
Halogenated (total)	1 mg/L	
Trichloromethane (chloroform)	0.1mg/L	
Tetrachloroethene (perchlorethylene)	0.01mg/L	
Trichloroethene (trichloroethylene)	0.1 mg/L	

V. Any substance not listed in the above tables is a prohibited discharge and may not be discharged without prior approval of Council. Council may request specific demonstrable evidence based on degradability and toxicity for any substance when assessing acceptance to sewer.

# APPENDIX 3 - PRE-TREATMENT GUIDELINES FOR TRADEWASTE DISCHARGES

#### **A3-1 INTRODUCTION**

The following information is provided as a guide to assist Approval Holders. As waste quality may vary both within a given industry and between individual industries of the same type, the adequacy of these guidelines will need to be verified for each discharge.

#### A3-2 WASTE FROM COMMERCIAL AND SERVICE INDUSTRIES.

Occupiers or Owners of all premises where commercial or service enterprises are undertaken, or likely to be undertaken, must apply to the Council for a Trade Waste Approval to discharge trade waste to the Council sewer system. Discharge without approval is an offence under the Water Supply (Safety and Reliability) Act 2008 and is subject to penalties of up to 1665 penalty units (\$166,500.00) as defined in the Act.

Commercial and service enterprises include, but are not limited to, the following:

Restaurants, Coffee shops, Cafes

Fast food outlets/Take-a-ways

**Butchers** 

Bakers/Hot bread shops

Seafood shops

Delicatessens

**Pie/Pastry outlets** 

**Ice-cream Parlours** 

Hotels

Motels

Backpacker accommodation

Caravan Parks with onsite laundry facilities or camp kitchens

Hospitals

Clubs

Laundromats

Hairdressers

Nursing homes

Medical surgeries (includes dental, veterinary, chiropractic – where have X-rays) Garbage collection areas in commercial buildings Service stations/ other automotive related businesses (small scale) Small engineering works Photographic/X-ray/Graphic arts/Mini labs Air-conditioning waste-condensates, Cooling tower wastes Commercial refrigeration condensates Commercial/public swimming pool backwash water Supermarkets/Shopping centres

In most cases wastes from these businesses would be termed as minor generators and would be suitable for discharge to the sewer after appropriate pre-treatment as indicated in Table 1. However, the Trade Waste Officer will access all trade waste generators and determine their category.

# A3-3 CONTAINMENT OF TOXIC/HAZARDOUS SUBSTANCES

Any potentially toxic or hazardous substances must be stored in bunded areas where leaks, spillages, or overflows cannot be drained by gravity or by any automated mechanical means to the sewer or the stormwater system.

Bunding of toxic or hazardous substances must meet recommendations of applicable best practice guidelines, standards or codes of practice.

#### A3-4 PRE-TREATMENT REQUIREMENTS FOR BUSINESS TYPES

The business types listed below are deemed to comply with sewer acceptance criteria when discharging trade waste through properly installed and maintained pre-treatment infrastructure, unless otherwise specified in the relevant trade waste approval. The table below provides details of sizing requirements of facilities, if required, together with notations on special requirements. In all instances, sizing calculations for pre-treatment devices need to be confirmed by Council's Trade Waste Officer.

<b>BUSINESS TYPE</b>	BASIC PRE-TREATMENT REQUIREMENTS
Workshops	
Automotive Industries service stations, car detailers	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hour).
Mechanical Workshop	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hour).
Food Service	

#### TABLE 1: PRE-TREATMENT REQUIREMENTS

<b>BUSINESS TYPE</b>	BASIC PRE-TREATMENT REQUIREMENTS
Cafe/Canteen/Cafeteria	Standard grease arrestor sizing.
cooking on site	
Chicken (Fresh)	Standard grease arrestor sizing.
cutting and preparation of fresh meat	
Chicken Cooking (Minor Retail)	Standard grease arrestor sizing.
BBQ, charcoal, rotisserie	
Chicken Cooking (Major Retail)	Grease arrestor with a capacity greater than the peak hourly flow (L/hour), but minimum 3000L grease arrestor.
Direct cooker connection to sewer (i.e. steam "combi" oven)	
Coffee Shop/Sandwich Shop/Sandwich Bar	No pre-treatment required.
no cooking on site and discharge <1000L/day	
Coffee Shop/Sandwich Shop/Sandwich Bar	Standard grease arrestor sizing.
cooking on site	
Commercial Kitchen	Standard grease arrestor sizing.
hotel, motel, function centre, hospital	In food preparation and handling areas install:
	<ul> <li>authorised in-sink basket traps being of self-closing or fixed screen type.</li> </ul>
	<ul> <li>authorised floor wastes being of a basket trap of self- closing or fixed screen type.</li> </ul>
	Food disposal units must be registered with Council.
Community Hall Kitchens	No pre-treatment required.
minimal food preparation at site	
Community Hall Kitchens cooking on site	Standard grease arrestor sizing.
Doughnut Shop	Standard grease arrestor sizing.
cooking on site	
Fast Food Outlet – Major Franchise cooking on site	Grease arrestor with a capacity greater than the peak hourly flow (L/hour), but minimum 2000L grease arrestor.
Fish and Chip Shop	Standard grease arrestor sizing.
Hotel/Motel/Bar/Nightclub	No pre-treatment required.
no cooking on site	
Hotel/Motel/Bar/Nightclub	Standard grease arrestor sizing.
with counter lunches, cooking	
Ice Cream Parlour	No pre-treatment required.
without hot food takeaway	
Ice Cream Parlour	Standard grease arrestor sizing.
with hot takeaway food	
Pizza Shop	Standard grease arrestor sizing.
(not a major chain)	
Restaurant	Standard grease arrestor sizing.
School Canteen	No pre-treatment required.

	BASIC PRE-TREATMENT REQUIREMENTS
no cooking on site	
School Canteen	Standard grease arrestor sizing.
cooking on site	
School Home Science/Hospitality Kitchen	Standard grease arrestor sizing.
Takeaway Food Shop	No pre-treatment required.
no food cooked on site (i.e. sandwich bar)	
Takeaway Food Shop	Standard grease arrestor sizing.
cooking on site	
Tertiary Institution Kitchen/Canteen/Cafeteria	Standard grease arrestor sizing.
Specialty Food	
Bakery (Retail)	Standard grease arrestor sizing.
cooking on site (preparation of pastries, pies, sausage rolls etc)	
Butcher (Retail)	Standard grease arrestor sizing.
	All drainage from sinks and floor wastes must pass through an authorised basket trap of self-closing or fixed screen type.
Delicatessen	No pre-treatment required.
no meat or hot food cooked on site	
Delicatessen	Standard grease arrestor sizing.
hot food cooked on site	
Fresh Fish (Retail)	No pre-treatment required.
no fish cleaned, filleted or cooked on site	
Fresh Fish (Retail) fish cleaned, filleted or cooked on site	Standard grease arrestor sizing. In-sink basket traps of self-closing or fixed screen type.
Food Manufacturing/Processing	
Food Manufacturing – Minor	Standard grease arrestor sizing.
(<10 kL/day discharge)	In food preparation and handling areas install:
	<ul> <li>authorised in-sink basket traps being of self-closing or fixed screen type.</li> </ul>
	<ul> <li>authorised floor wastes being of a basket trap of self-closing or fixed screen type.</li> </ul>
Service Industries	
Beautician/ Hairdressing Salon	No pre-treatment required.
Hairdresser	No pre-treatment required.
	No discharge through grease arrestor.
Laundry	No pre-treatment required.
coin operated only (not commercial)	
Funeral Parlour	No pre-treatment required.

<b>BUSINESS TYPE</b>	BASIC PRE-TREATMENT REQUIREMENTS
School Science Laboratory	Authorised silt trap or dilution chamber with a capacity greater than the peak hourly flow (L/hour).
	Neutralisation chamber may be required.
School Art Studio/Block	Silt arrestor with a capacity greater than the peak hourly flow (L/hour).
Care Facilities	
Day Care Centre	No pre-treatment required.
no cooking on site	
Day Care Centre	Standard grease arrestor sizing.
cooking on site	
Hospital Kitchen	Standard grease arrestor sizing.
Nursing Home Kitchen	Standard grease arrestor sizing.
Retirement Village Kitchen	Standard grease arrestor sizing.
Commercial Process	
Bin Wash associated with commercial premises	Basket trap in floor waste being of self-closing or fixed screen type.
	Wastewater to pass via grease arrestor (if installed).
Carwash	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hour).
	Basket trap in floor waste being of self-closing or fixed screen type.
Cooling Tower Condensate/Blowdown	No pre-treatment required.
where this is the only discharge type	Metering solution required.
Refrigeration Condensate	No pre-treatment required.
	Metering solution required.
Compressor Condensate (large scale)	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hour). Metering solution required.
Veterinary and Pet Care	
Veterinary Practice	No pre-treatment required.
no discharge of regulated waste	
Hydrobath	Basket trap in floor waste being of self-closing or fixed screen type.

- 1. Standard arrestor sizing details are provided in section 7.1.3 of the TWEMP. Notwithstanding where standard sizings are indicated above, in all instances, size of pretreatment devices must be confirmed by Council and will be noted in conditions of approval.
- 2. Refer also Table 2 for additional requirements for mechanical workshop trade waste generators.
- 3. Refer also Table 3 for additional requirements for food industry trade waste generators.

# A3-5 GUIDELINES FOR ESTIMATING PEAK HOURLY FLOWS

FIXTURE/FITTING TYPE	PEAK HOURLY FLOW ALLOWANCE (LITRES/HOUR)
Bain Marie - water heated	Use 3 x maximum capacity of the apparatus
Bin Wash / wet garbage	Install in-floor self-closing dry bucket arrestor trap. Installation of a grease arrestor is not required.
Floor Waste / Bucket Trap / Grated Strip Drain	Allow 50 litres/hour for every 50 square metres of floor area, or part thereof. Add allowance for any listed connected apparatus
Sealed Floor Waste Gully	0
Cleaners Sink	30
Dishwasher - tunnel feed*	Use 3 x manufacturer's peak flow rate per hour
Dishwasher – large (>1 outlet)*	Use 3 x manufacturer's peak flow rate per hour
Dishwasher – medium (upright)*	300
Dishwasher – small (under bench)	150
Glass Washer - tunnel feed	Use 3 x manufacturer's peak flow rate per hour
Glass Washing Machine	150
Grease Canopy (water cleaned)	50
Hand Basin	30
Ice Cream Machine Soft Serve	60
Lab Sink	50
(commercial or research lab)	
Lab Sink (educational facility)	22
Noodle Cooker	100
Potato Peeler (large commercial application)	Use 3 x manufacturer's peak flow rate per hour
Potato Peeler (small kitchen application)	100
Rotisserie Rack	100
Steamer Roast Oven / Combi Oven	Allow 40 litres/hour per rack. 3000 litre grease arrestor minimum size.
Electric or Gas /Steamer Cooker / Kettle	200
Sink - Utility / Pot per outlet connected separately to drain (depth greater than 300mm)	300
Sink – Single Bowl	150
(depth up to and including 300mm)	
Sink – Double Bowl	300
(depth up to and including 300mm fixture pair connection)	

FIXTURE/FITTING TYPE	PEAK HOURLY FLOW ALLOWANCE (LITRES/HOUR)
Trough up to 4 taps	40
Trough greater than 4 taps	Refer to trade waste section for advice
Tundish Condensate	3
(refrigerator / freezer condensate)	
Tundish	Allow 10 litres/hour
(not refrigerator/freezer condensate)	Add allowance for any listed connected apparatus
Wok Burner Dry	30 litres/hour per water arm
Wok Burner Wet	Use 3 x manufacturer's peak flow rate per hour

\* Note it is preferable for medium to large dishwashers to be plumbed around the grease arrestor.

# A3-6 GREASE ARRESTOR REQUIREMENTS

#### A3-6-1 General

Information in Appendix A3-5 may be used for estimating the size of grease arrestors. The final determination of adequate capacity will be done by the Trade Waste Officer.

The maximum allowable capacity of an individual grease arrestor is 2000 litres. Where the capacity requirements for a premise are greater than 2000 litres, additional arrestors must be used, with each arrestor to be a discrete installation separately treating a defined waste stream.

The use of solvents, enzymes, mutant bacteria, odour control units or pesticide in grease arrestor traps is prohibited unless specifically approved by the Trade Waste Officer.

Cleaning and maintenance of grease arrestors will be carried out by Cassowary Coast Regional Council approved liquid waste disposal contractors at maximum of 3 monthly intervals or more frequently as specified in the Trade Waste Approval Conditions.

A hose tap is to be installed with-in 5 metres of the grease trap; this hose tap is to be used for grease trap cleaning purposes only. A backflow prevention device (double check valve) is to be installed immediately prior to the hose tap.

A permit to undertake plumbing work must be obtained from Council prior to installation.

All work to be performed by a licenced Plumber/Drainer.

# A3-6-2 Installations Within Buildings

Grease arrestor traps installed inside buildings will normally not be allowed, except in exceptional circumstances, and only with the approval of Council's Trade Waste Officer and Council's Environmental Health Officers. When installed and requiring remote pump-out, the arrestor must be of the "Boat Bottom" design and fitted with gas tight lids.

# A3-6-3 Cover and Frame Installation

The cast iron interceptor trap frame must be jointed to the thickening rib and or wall extension of the interceptor trap by Araldite Epoxy or similar Council approved material. The "in-situ" concrete surround around the frame must be 200mm wide and extend below the angle of the thickening rib of the interceptor trap.

#### A3-6-4 Grease Interceptor Trap Covers

Installation of covers and cast iron frame must comply with Councils requirements and the Sewerage and water Supply Act to ensure that a gas tight seal lids obtained between cover and frame. Covers must be machined edged.

The cast iron frame must be the full length and full width of the trap opening and placed on the thickening rib of the interceptor trap or the vertical concrete extension thereto of the interceptor trap wall and flush with the inside of the vertical wall extension and or the thickening rib of the interceptor trap. Lid must allow full access for servicing of the grease arrestor baffles.

Loose checker plate steel lid may be used in open air and un-trafficable areas only. Top of the grease trap will be a minimum of 50 mm above the surrounding surface area or flood level with a tapered concrete apron.

#### A3-6-5 Concrete Wall Extensions and Concrete

Pre-cast and "in situ" concrete wall extensions and or surrounds to be vertical, smooth and free of air holes and jointed flush with the inside of the interceptor trap wall. Material used for the jointing of the pre-cast concrete products to the interceptor trap must be industrial Araldite Epoxy or similar Council approved material.

#### A3-6-6 Grease Interceptor Outlet Inspection

Outlet inspection opening to be 100 mm screwed brass cleaning eye finished at ground level with a concrete surround.

#### A3-6-7 Venting of Grease Arrestors

Grease arrestors will be vented. Size of vent to be minimum of 100 mm diameter.

# A3-7 GUIDE FOR DRAINS AND DISCHARGE PIPES CONVEYING TRADE WASTE

#### List of discharges wherein vitrified clay pipe or other approved materials would be required.

Laundries – commercial and hospital Hospitals – sterilizers, autoclaves, laboratories Tanneries Anodising plants Smallgoods manufacture Boiler blow down from industrial premises Poultry abattoir Margarine and butter manufacture Mechanical parts washing – solvents Printing works Food processing Bakery Restaurant Fish and chip shop Car wash Retail butchery

#### List of discharge wherein vitrified clay pipe or other approved material would be optional.

Coffee shop Milk bar Garbage compaction areas

FIXTURE WASTES CONNECTED TO TRADE WASTE DRAINS <u>ARE NOT</u> TO BE INSTALLED IN COPPER/BRASS PIPING AND FITTINGS.

#### A3-8 FOOD WASTE DISPOSAL UNITS

Food waste disposal units (garbage grinders/in-sink waste disposal units) <u>may be approved in</u> commercial applications. Where installation is approved, an annual charge based on motor power will apply. Garbage grinders must discharge direct to sewer and cannot discharge through grease interceptor traps.

Potato peelers also come within this category and are subject to the same charges and conditions.

#### **A3-9 OIL ARRESTORS**

#### A3-9-1 Installation requirements for oil arrestors are as follows.

- Only council approved equipment to be installed
- Installation must comply with relevant Council Building and Plumbing by-laws
- Minimum capacity 1,000 litres per hour
- Where required pumps to be sized so as not to exceed the capacity of the arrestor
- Only approved non-emulsifying pumps to be used
- Sludge outlet to be fitted with a full flow valve
- Manufacturers recommended servicing/clean schedules must be adhered to
- Servicing records to be kept and made available to Trade Waste Officers
- Cleaners and detergents must be of "Quick Break" formulation

In ground triple chamber type oil arrestors are no longer permitted for oil and grease separation. Oil arrestors are to be of the Coalescing Plate type, Vertical Gravity arrestors, Hydro-cyclones, or other Council approved devices. Minimum capacity of oil traps to be 1kL/hour.

Only Council approved 'Quick Break Detergents' may be used where waste is discharged to sewer via an oil interceptor.

Only non – emulsifying pumps such as an electrically driven diaphragm pump (at less than 40 cycles per minute) may be used to pump the wastewater to an arrestor. The pump discharge must not be greater than the capacity of the arrestor.

Any person wishing to sell a Oil Arrestor system which includes the pump for treatment of wastewater going to sewer must confirm to these guidelines.

# A3-9-2 House keeping procedures

'Housekeeping' refers to all work practices and activities which minimize waste. There are a number of housekeeping practices which can be adopted to reduce wastewater levels and lessen the load placed on pre-treatment facilities. Good housekeeping procedures should be adopted wherever possible and in some circumstances can even classify the generator as a non discharger. Some of the practices are:

- Use less water by adopting dry cleaning methods. The less water used the less trade waste wastewater to be treated.
- Dry cleaning methods include wiping up spills and sweeping, rather than hosing. There are absorbent packs available to soak up oil spills.
- Ensure that all equipment is properly cleaned and maintained.
- Don't pour oil down the drain, Ensure that adequate storage is provided for used oil and that a collection program is arranged with an oil recycler.
- Use "Quick Break" detergents. These help remove oil at the pre-treatment stage.
- Use cleaning products that have a PH of between 7 -10 at working concentrations.

#### A3-9-3 Maintenance of Oil Interceptors

Maintenance cleaning of oil interceptors must be carried out on a regular basis in accordance with conditions of the trade waste approval by a Council approved Industrial Liquid Removal Contractor licensed under the Environmental Protection Act and the Environmental Protection Regulation.

Building Codes Queensland's (BCQ) position regarding Oil separators (OS) and licensing requirements for servicing and maintaining trade waste apparatus.

1. OS are a trade waste device connected to a sanitary drainage system. The installation and maintenance of OS units must be done by a licensed plumber drainer.

2. General servicing and cleaning of the OS can be performed by an unlicensed plumber however; any work necessary for maintaining or repairing the apparatus would have to be performed by a licensed plumber.

Regular cleaning of oil separators is required to ensure effective operation.

Council will set the service frequency (period between services) of each oil separator as part of a Category 1 trade waste approval. This is usually every 3 months.

Maintenance should be in accordance with manufacturer's instructions. For most systems, the following process is used:

- Manually operate the pump to reduce the volume of wastewater in the holding tank to the lowest level.
- Drain sludge hopper on the separator back into the holding tank.
- Remove and clean plate or coil pack with quick break detergents and pressure cleaner.
- Hose out oil water separator thoroughly.
- Pump out all of the wastewater in the holding tank by a liquid waste contractor.
- Reinstall plate/coil pack and secure to oil separator to stop the pack from floating.
- Close sludge valve.
- Fill oil separator with clean water.
- Run on manual to reset oil skimmer level.

Council is to be advised within a month that the service has been completed and of any maintenance issues noted. It is preferred that this advice be provided by service contractors in a monthly service docket. Servicing records (from service agent, waste contractor and/or in-house records) should be kept and made available to Trade waste Officers when required.

#### A3-10 WORKSHOP PRE-TREATMENT REQUIREMENTS

Functional activities of mechanical workshops necessitate additional measures and pre-treatment to contain and treat the wastes from the site as outlined in Table 2.

# TABLE 2: GENERAL PRE-TREATMENT GUIDELINES FOR MINOR MECHANICAL WORKSHOPS

PROCESS	PRE-TREATMENT	HINTS
Parts washin with water	Wash area to be bunded to contain wash water. If outside the workshop, wash area is to be bunded and roofed or if no roof, fitted with a first flush diversion system, a collection well and non-emulsifying pump.	Screens may be useful to exclude nuts and washers from the pump intake. Cleaning compounds to be compatible with the pre-treatment system. The cleaning and maintenance program specified by the supplier should be followed. Oil to be drained or wiped from parts prior to washing. Store used oil for recycling.
Parts washing	Spent solvents to be removed off-site	Read the MSDS for each of the
with	for regeneration or disposal.	materials being used
Solvents	Area containing the parts wash to be	
(preferred	bunded to contain any spillage or	
method)	leakage.	
	N.B. There is no discharge to	
	Sewer	
Floor wash	Area to be under roof and bunded to	Screen may be used to exclude
Down	exclude rainwater but include wash	Washers and nuts from the pump
(Perodic)	water.	intake. Cleaning compounds to be
		compatible with the pre-treatment
		system. The cleaning and
		maintenance program specified by
		the supplier should be followed. Oil
		spills should be soaked up prior to
		washing. Grease blobs should be
		scraped up before washing.

PROCESS	PRE-TREATMENT	HINTS
Vehicle body repair shops (Wet rubbing) Washing of vehicle body Only. ( No degreasing)	Wet rubbing area to be roofed and Bunded or fitted with a first flush diversion system. Area to drain to a minimum 1000 litre interceptor trap. Wash area to be bunded to contain wash water. If outside the workshop The wash area is to be bunded and roofed, or if no roof installation of a first flush diversion system is required. A 550 litre minimum triple interceptor	Interceptor to be serviced at regular intervals by a licenced contractor. Interceptor to be serviced at regular intervals by a licenced contractor.
Vehicle detailing (De- greasing)	trap is required. Area to be under roof and bunded to exclude rainwater but include wash water. A collection well and non-emulsifying pump. An approved oil arrestor with an oil collection container and sludge removal system, all within a roofed and bunded area.	Collection well/silt trap to be serviced at regular intervals by a licenced industrial liquid removal contractor.
Service stations – covered forecourt		NOT PERMITTED TO SEWER OR STORMWATER DRAIN. Dry cleaning technique should be adopted.

# A3-11 FOOD INDUSTRY PRE-TREATMENT REQUIREMENTS

Functional activities of food industries necessitate additional measures and pre-treatment to contain and treat the wastes from the site as outlined in Table 3.

# TABLE 3: MISCELLANEOUS GENERAL PRE-TREATMENT REQUIREMENTS FOR THE FOOD INDUSTRY

PROCESS	PRE-TREATMENT	HINTS
All premises involved in	Grease arrestor. For sizing see Table 1	Grease arrestors to be serviced at
cooking food	and appendix A3-5. Dry basket arrestors	regular intervals by a licenced
	in floor wastes and sinks. Used oil and	liquid waste disposal contractor.
	fat storage area to be roofed and	
	bunded. Garbage bin cleaning area to be	
	roofed and bunded, wastewater to pass	
	though a dry basket and discharged	
	through a grease arrestor.	
Food preparation only	Dry basket arrestors in floor wastes and	Grease arrestors to be serviced at
	in sinks.	regular intervals by a licenced
	Grease arrestor in some circumstances as determined by the Trade Waste Officer.	liquid waste disposal contractor.

#### A3-12 CATEGORY 2 - PRE-TREATMENT REQUIREMENTS

Category 2 pre-treatment requirements will be assessed on an individual basis. As part of the trade waste approval application process, the applicant will be required to employ the services of a Trade Waste Consultant to report on the type, volume and concentrations of trade wastewater and the methods that will be adopted to ensure Council's sewer admission limits are met. This report must be forwarded to Council with the application for approval.

# APPENDIX A4 - AUTHORISED PRE-TREATMENT DEVICES APPROVAL FOR COMMERCIAL PURPOSES

#### A4-1 GENERAL AUTHORISATION REQUIREMENTS

Installation of pre-treatment devices must meet Australian Standards, Occupational Health and safety Standards and Council guidelines. Pre-treatment devices installed in the Councils area of operations not meeting these standards and guidelines will be required to be removed at the cost of the installer.

Note: Grease traps with cartridge filters – kitchens cooking pasta or rice, cartridge type systems not allowed.

Only products currently authorized for installation in the Cassowary Coast Regional Councils area of operations will be permitted.

MATERIAL CODE	
С	Concrete/reinforced precast
	Must be epoxy coated internally
SS	Stainless Steel
G	Glass reinforced concrete.
	Must be epoxy coated internally
GRP	Glass reinforced plastic (Fiberglass)
М	Epoxy coated mild steel
Р	Polyethylene/Polypropylene

PRODUCT CODE	
CPI	Coalescing plate interceptor
CPS	Corrugated plate separator
OWS	Oil water separator
VGS	Vertical gravity separator
	Both oily & greasy waste
kL/h	Kilolitre per hour
SCD	Surge control device

# A4-2 AUTHORISED GREASE TRAPS AND GREASE EXTRACTORS

MANUFACTORER	SUPPLIERS ITEM	GREASETRAP	GREASE	ABOVE OR INGROUND	MATERIAL
& CONTACT DETAILS	& CAPACITY	BOATSHAPED	EXTRACTOR	INSTALLATION	CODE
			OR OTHER		
Aglass Pty Ltd	AGL 1000 – 1000 L	YES	NO	вотн	GRP
	AGL 1500 – 1500 L				
www.aglass.com.au	AGL 2000 – 2000 L				
	AGL-500-GA-SL-A	NO	YES		
	AGL-500-GA-SL-B				
	Both fitted with				
	Zabel A300/12 filter				
AJM Environmental	GA1000SS – 1000 L	YES	NO	ABOVE GROUND	SS
Services Pty Ltd	GA1500SS – 1500 L				
	GA2000SS – 2000 L				
www.ajmenviro.com.au	GA3000SS – 3000 L				
	GA4000SS – 4000 L				
	GA5000SS – 5000 L				
BCP Precast	GAP-01000 - 1000 L	YES	NO	вотн	С
1800 804 134	GAP-01500 - 1500 L				
	GAP-02000 - 2000 L				
www.bcp.com.au	GAP-03000 - 3000 L				
	GAP-04000 - 4000 L				
	GAP-05000 - 5000 L				
Eclipse Environmental	GA1000S – 1000 L	YES	NO	ABOVE GROUND	SS
02 9721 3071	GA1500S – 1500 L				
	GA2000S – 2000 L				
	GA3000S – 3000 L				
	GA4000S – 4000 L				
	GA5000S – 5000 L				
	GA1000F – 1000 L	YES	NO	вотн	GRP
	GA1500F – 1500 L				
	GA2000F – 2000 L				
	GA3000F – 3000 L				
	GA4000F – 4000 L				
	GA5000F – 5000 L				
	DELTA 1 (8 mm thick FRP	NO	YES	вотн	Р
FRP Technologies P/L	FA-1 GABS 1000 L	YES	NO	ABOVE GROUND	GRP
02 9673 5366	FA-1.5 GABS 1500 L				
	FA-2 GABS 2000 L				
	FA-3 GABS 3000 L				
	FA-4 GABS 4000 L				
	FA-5 GABS 5000 L				

	FI-1 GABS 1000 L	YES	NO	IN GROUND	GRP
	FI-1.5 GABS 1500 L				
	FI-2 GABS 2000 L				
	FI-3 GABS 3000 L				
	FI-4 GABS 4000 L				
	FI-5 GABS 5000 L				
	Profile 1 with A300 filter	NO	YES	BOTH	GRP
Gebel Aquasafe	Aquasafe grease	NO	YES	BOTH	Р
02 4722 9696	arrestor				
sales@	with Zabel A300 filter				
gebelaquasafe.com.au					

# A4-3 GREASE TRAPS AND GREASE EXTRACTORS

MANUFACTORER	SUPPLIERS ITEM	GREASETRAP	GREASE	ABOVE OR INGROUND	MATERIAL
& CONTACT DETAILS	& CAPACITY	BOATSHAPED	EXTRACTOR	INSTALLATION	CODE
			OR OTHER		
Halgan Pty Ltd	Ecotec S100	NO	YES	BOTH	Р
02 9972 1355	Grease Extractor				_
	Modular Grease Trap with	NO	YES	BOTH	
	SCD, 1000 L to 5000 L				
Everhard industries	550 L	NO	NO	вотн	С
13 19 26	1000L				
	2000L				
Industrial Separation	VGS 1500 L/h grease	NO	YES	ABOVE GROUND	SS
Systems (ISS)	separator (with mono				
02 9524 6654	pump CP25)				
	VGS 2500 L/h grease				
	separator (with mono				
	pump CP800)				
	Note: products for				
	installation in McDonald's				
	Restaurants only				
J B Collitt Pty Ltd	JBC1000 SS 1000 L	YES	NO	ABOVE GROUND	SS
02 9773 8816	JBC2000 SS 2000 L				
	JBC3000 SS 3000 L				
	JBC4000 SS 4000 L				
	JBC5000 SS 5000 L				
John Lynch	1500 L	YES	NO	ABOVE GROUND	SS
Engineering	5000 L			SELF SUPPORTING	
Pty Ltd					
0412 649 860					

Mascot Engineering	GA-100 1000 L	YES	NO	вотн	G
02 9644 1044	GA-150 1500 L	120		bonn	0
1300885 295	GA-200 2000 L				
sales@mascoteng.	GA-200T 2000 L				
com.au	GA-300 3000 L				
	GA-400 4000 L				
Sepa Waste Water	BS 10 1000 L	YES	NO	ABOVE GROUND	SS
Treatment P/L	BS 15 1500 L				
9525 4788	BS 20 2000 L				
	BS 30 3000 L				
	BS 40 4000 L				
	BS 50 5000 L				
Stainless Metal Craft	GT-1 1000 L	YES	NO	ABOVE GROUND	SS
02 4735 5666	GT-1.5 1500 L			SELF SUPPORTING	
	GT-2 2000 L				
	GT-3 3000 L				
	GT-4 4000 L				
	GT-5 5000 L				

# A4-4 AUTHORISED OIL WATER SEPARATORS

#### AUTHORISED AS AT 28TH JULY 2009

MANUFACTURER &	SUPPLIERS ITEM	LITRE/HOUR	PUMP TYPE	MATERIAL
CONTACT DETAILS				CODE
All Pumps Sales and	KWIKFO KCPS -1000	1000	KDS 25-100 DIAPHRAM	Р
Service	KWIKFLO KCPS-1500	1500	KDS 25-150 DIAPHRAM	
02 9683 5555				
Baldwin Industrial	CPS MPAK –MPM-12	1000 L/h	DS25 –diaphragm	Р
Systems Pty Ltd	CPS MPAK –BMM-64/2/12	2000 L/h	DS32 - diaphragm	
02 9545 2811	CPS MPAK –BMM-64/3/12	3000 L/h	DS38 - diaphragm	
	CPS VPAK –MPV-12	1000 L/h	DS25 - diaphragm	
	CPS VPAK –BMV-64/2/12	2000 L/h	DS32 - diaphragm	
	CPS VPAK –BMV-64/4/12	3000 L/h	DS38 -diaphragm	
Clearmake Pty Ltd	CB 1.0 SS - P vert. tube pack	700 L/h	CP11 RJ – mono	SS
07 5455 6822	CL 1.5 SS - P vert. tube pack	700 L/h	CP11 RJ - mono	
	CL 3.0 SS - P vert. tube pack	1600 L/h	CP25 RJ – mono	
	CL 1.5 SS –D vert. tube pack	1140 L/h	CM 1000 –nitrile diaphragm	
Eclipse Environmental	Eclipse Hydroflow			SS
02 9721 3071	1000S – fibreglass plates	1000 L/h	Eclipse DP25 - diaphragm	
	3000S – fibreglass plates	3000 L/h	Eclipse DP40 - diaphragm	
	5000S – fibreglass plates	5000 L/h	Eclipse DP50 - diaphragm	
FRP Technologies Pty	PTW OS15 - fibreglass plates	1.5 kL/h	Kwikflo K/SM 25 1380 L/h	GRP
Ltd	PTW OS30 - fibreglass plates	3.0 kL/h	Kwikflo K/SM 32 2750 L/h	
02 9673 5366				

		1		1
Industrial Separation	VGS V10P0F	1000 L/h	ASM DS/DT25 - diaphragm	P, SS
Systems (ISS)	VGS V15P0F	1500 L/h	ASM DS/DT25 - diaphragm	
02 9524 6654	VGS V15P3F	1500 L/h	ASM DS/DT25 - diaphragm	
	VGS V15P3A	1500 L/h	ASM DS/DT25 - diaphragm	
	VGS V20P3A	2000 L/h	ASM DS32 - diaphragm	
	VGS V30P3A	3000 L/h	ASM DS38 - diaphragm	
	VGS V30S0F	3000 L/h	ASM DS38 – diaphragm	
	VGS V10P0FP	700 L/h	CP11 RJ - mono	P, SS
	VGS V15P3FP	1600 L/h	CP25 RJ - mono	
Mascot Engineering	Mascot CFI 15	1500 L/h	ASM DS25 – diaphragm	GRP
02 9644 1044	Mascot CFI 30	2500 L/h	ASM DS32 - diaphragm	
1300885 295				
sales@mascoteng.				
com.au				
Mike Miles Trade Waste	Marlin OS 15	1.5 kL/h	ASM DS25 – diaphragm	GRP
02 9672 4858	Marlin OS 30	3.0 kL/h	ADM DS32 – diaphragm	
Sepa Waste Water	Sepa – SS 1500, ss plates	1380 L/h	DS or DT 25 - diaphragm	SS
Treatment Pty Ltd	Sepa – SS 3000, ss plates	2580 L/h	DS or DT 32 - diaphragm	
02 9525 4788	Sepa – SS 5000, ss plates	4200 L/h	DS or DT 38 - diaphragm	
Ultraspin Technology	Ultraspin Oil/Water Separator		(Air operated diaphragm)	SS
P/L	OS 20	1500 L/h	ARO 666-120-322-C	
03 9872 5466	OS 35	3500 L/h	ARO 666-170-322-C	

#### A4-5 AUTHORISED OTHER PRE-TREATMENT PRODUCTS

PRODUCT HEADINGS	SUPPLIERS ITEM	MANUFACTURER &
		CONTACT DETAILS
AVERAGING, MIXING,	Mascot Averaging, Mixing, Cooling and	Mascot Engineering Group
DILUTION AND	Dilution Pits (GRC)	02) 9644 1044
COOLING PIT	L8/C8-800L, L10/C10-1000L, L12/C12-	1300885 295
	1200L, L15/C15-1500L - AMDCL8-800L,	sales@mascoteng.
	AMDCL10-1000L, AMDCL12-1200L,	com.au
	AMDCL15-1500L	
BIOLOGICAL ADDITIVE	Grease Eradication System – GES	Environmental Biotech
		02 9810 7179
BUCKET TRAPS	Blucher –	Blucher (Australia) Pty Ltd
	Floor Models: 780.200.000.03s, 780.200.000.05s,	08 8374 3426
	780.300.000.03s, 780.300.000.05s	
	(Stainless steel)	
	Capper –	Cap Kay Corporation
	Sink Model: SG1	02 9629 5404
	(Stainless steel)	
	Everbright -	Everbright
	Sink Models: SA-001, SA-002	0416 239 986
	(Stainless steel)	
	Mascot -	Mascot Engineering Group
	Floor Models: SBA-1A, SBA-2A	02 9644 1044
	(GRC)	1300885 295
		sales@mascoteng.
		com.au
	Club Stainless & Accessories -	Rovumstil P/L trading as
	Sink models: SSBW, SSBW-1	Club Stainless & Accessories
	(Stainless steel)	02 4587 9887
	SPS -	Speciality Plumbing Supplies
	<i>Floor Models:</i> BA100SS, R150SR-BT, Q150SR-BT, LG100SA-BT,	02 9416 8031
	LG100SSA-BT, R150SA, R150SSA, R150SA2, R225SA,	
	R225SSA, R225SA2, Q150SA, Q150SSA, Q150SA2, Q200SA,	
	Q200SSA, Q200SA2, LG100A-S, LG100A-SSA, LG100A2- S,	
	LG100A2-SS, R225SA3, R22SSA3, Q200-150SA, Q200- 150SSA,	
	Q225ABA, Q225SA, Q225SSA, Q300DA, Q300NA, Q300NA, Q300SA,	
	Q300SSA, LG150A-N, LG150A-S, LG150A-SS, LG150A- SSA,	
	Q150SR-BTM	

	(Stainless steel, Bronze, Aluminium, Nickel-Bronze,	
	Chrome-plated Bronze, Grey Cast Iron, Ductile Iron)	
	Stainless Metal Craft -	Stainless Metal Craft
	Sink Models: WSCK-1, ISW-50	02 4735 5666
	<i>Floor Models:</i> AT-1, AT-1-HST, CKT-200, AT-1-100S, AT-2, AT-2-	
	HST, CKT-150, AT-5, AT-5-ST, AT-5-HST, AT-5-VCR, CKT- 125,	
	AT-6, AT-6-XHD, AT-8, AT-9, FFW-1	
	(Stainless steel)	
	Vinidex -	Vinidex Pty Ltd
	Sink Models: 93000, 93010	13 11 69
	Floor Model: 93003	
	(Stainless steel)	
DRY ARRESTOR PIT	Mascot Dry Arrestor Pit,	Mascot Engineering Group
	(GRC) Product No. S4 & S5	02 9644 1044
		1300885 295
		sales@mascoteng.com.au

#### OTHER PRE-TREATMENT PRODUCTS

PRODUCT HEADINGS	SUPPLIERS ITEM	SPECIAL CONDITIONS	MANUFACTURER & CONTACT DETAILS
GENERAL PURPOSE PIT	Aglass General Purpose Pit (Fibreglass) Model: AGL1000GP – 1000 litres		Aglass Sales Pty Ltd 02 9526 2822
	Aline General Purpose Pit (Fibreglass) Model: AGPP-1000 – 1000 litres		Aline Pumps Sales & Service 02 9544 9999
	BCP General Purpose Pit (Precast Concrete) GPP-01000 1000 L, GPP-01500 1500 L, GPP-02000 2000 L		BCP Precast 1800 804 134
	Mascot General Purpose Pit (GRC) GP100-1000 L, GP150-1500 L, GP200-2000 L.		Mascot Engineering Group 02 9644 1044 1300885 295 sales@mascoteng. com.au
GREASE REMOVAL DEVICE UPSTREAM OF A STANDARD GREASE TRAP	Grease Guardian, (Stainless steel) Models: D1, D2, D3, D4, D5	ONLY FOR USE UPSTREAM OF AN AUTHORISED STANDARD SIZED GREASE TRAP	Patrick Charles Pty Ltd 02 9439 0000
	Thermaco Big Dipper (Stainless steel)	ONLY FOR USE	M A Griffith

	Models: W-150-IS-E, W-200-IS-E, W-250-IS W350-IS-E, W-500-IS-E	UPSTREAM OF AN	03 9399 8444
	W350-13-L, W-500-13-L	AUTHORISED	
		STANDARD SIZED	
		GREASE TRAP	
SILT ARRESTOR	Mascot Silt Arrestor Pit (GRC) Model:		Mascot Engineering
	SA10-1000L, SA15-1500L, SA20-2000L		02 9644 1044
			1300885 295
			sales@mascoteng.
			com.au
PLASTER TRAP	Alphabond Nr 1001		Alphabond Dental P/L
	Gipsabscheider Plaster Trap		02 9411 6400
SOLIDS SETTLEMENT	GJS Solid Separating Filtering Settling		GJS Machinery P/L
PIT	Tank - 250L holding capacity		02 9790 1649
	(for the printing industry)		
	Mascot Solids Settlement Pit (GRC)		Mascot Engineering
	Product No: GSS5-500L, GSS7-750L,		02 9644 1044
	GSS10-1000L, GSS15-1500L, GSS20-		1300885 295
	2000L GRC		sales@mascoteng.
			com.au
UNDER SINK	Eclipse undersink unit (10 mm thick		Eclipse Environmental
PUMP UNIT	HDPE) USU1000 – with Davey		02 9721 3071
	pump/D15VA 110 L/m		
	Gebel Aquasafe under sink unit 90 L with		Gebel Aquasafe
	Hyflo submersible vortex pump /HV04-100		02 4722 9696
	L/minute @ 7m		
	Halgan ECOTEC Grease Extractor S100	ONLY FOR ABOVE	Halgan Pty Ltd
	under sink pump unt - EUS/95/HV05A	GROUND USE	02 9972 1355