

CASSOWARY COAST REGIONAL COUNCIL'S **PRETREATMENT GUIDELINES FOR TRADEWASTE** **DISCHARGES**

1.0 INTRODUCTION

As part of its trade Waste Environmental Management Plan, Cassowary Coast Regional Council will be strictly regulating the discharge of trade waste to the sewer. All discharges must comply with the Sewer Admission standards as set out in the Trade Waste Environment Management plan. Trade Waste is the liquid waste generated from any industry, business trade or manufacturing process. It does not include human waste.

The following information is provided as a guide to assist waste generators. 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.

2.0 WASTE FROM COMMERCIAL AND SERVICE INDUSTRIES.

Owners of all premises where commercial or service enterprises are undertaken, or likely to be undertaken, must apply to the Cassowary Coast Regional Council for a Trade Waste Permit to discharge waste to the sewer. Discharge without approval is an offence under the Water Supply (safety and Reliability) Act 2008 and the Local Government Act 1993 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
- 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
- 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.

3.0 GREASE ARRESTOR REQUIREMENTS

Table 2 outlines different methods 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 shall 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 Permit 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.

3.1 INSTALLATION WITHIN BUILDINGS

Grease arrestor traps installed inside buildings will normally not be allowed, except in exceptional circumstances, and only with the approval of Cassowary Coast Regional 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.

4.1 COVER AND FRAME INSTALLATION

The cast iron interceptor trap frame shall 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 shall be 200mm wide and extend below the angle of the thickening rib of the interceptor trap.

4.2 GREASE INTERCEPTOR TRAP COVERS

- Installation of covers and cast iron frame shall 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 shall be machined edged.

- The cast iron frame shall 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.

4.3 CONCRETE WALL EXTENTION AND CONCRETE SURROUND.

Pre-cast and "in situ" concrete wall extensions and or surrounds shall 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 shall be industrial Araldite Epoxy or similar Council approved material.

TABLE 2: GUIDELINES FOR SIZING GREASE ARRESTORS

The capacity of a grease arrestor may be calculated from the following capacity allowances for various fixtures and fittings in commercial premises.

Fixture/Fitting	Capacity (Litres)
Commercial kitchen sink	100
Double bowl or pot sinks	300
Basin	30
Water heated Bain-marie	50
Dishwasher	
Small (under bench)	400
Medium (upright)	800
Large (more than one outlet)	1200
Steamer/Hydrotherm/Boiling pots/Stock pots	100
Wok burner	100
Mixing bowl	140
Glass washers (not in a liquor sales area)	250

If in a restaurant, coffee shop, hotel, motel, hostel, nursing home etc. does not have fixture or fittings in excess of 250 litres capacity, the following criteria shall apply;

Servicing capacity	Minimum size grease arrestor
0 – 40 person	550 ltr
40 – 90 person	1000 ltr
90 – 180 person	2000 ltr

MINIMUM GREASE ARRESTOR CAPACITIES

Business	Interceptor Size	Comment
Take-a-ways	550 ltr	No cooking chicken, no woks
Delicatessens	550 ltr	
Retail seafood outlets	550 ltr	No processing cooking
Ice-cream parlour	550 ltr	

Hot bread shop	550 – 1000 ltr	Depending on fixtures/ fittings/ seating capacity
Pizza shop	550 – 1000 ltr	
Take-away and delicatessen	550 – 1000 ltr	
Coffee shop (0-40 person)	550 – 1000 ltr	
Restaurant (0-40 person)	550 – 1000 ltr	
Retail butcher	550 – 1000 ltr	
Coffee shop (40-90 person)	1000 – 2000 ltr	
Restaurant (40-90 person)	1000 – 2000 ltr	
Nursing homes	2000 ltr	
Hostel	2000 ltr	
Hotel	2000 ltr	
Hospital	2000 ltr	
Retail chicken	2000 ltr	
Shopping centres	2000 ltr	Combination of shops

4.4 GREASE INTERCEPTOR OUTLET INSPECTION OPENING

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

4.5 VENTING OF GREASE ARRESTORS

Grease arrestors shall be vented, size of vent to be minimum of 100 mm diameter.

5.0 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 ARE NOT TO BE INSTALLED IN COPPER/BRASS PIPING AND FITTINGS.

6.0 FOOD WASTE DISPOSAL UNITS

Food waste disposal units (garbage grinders/in-sink waste disposal units) may be approved in commercial applications. Where installation is approved an annual charge based on motor power shall 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.

7.0 OIL ARRESTORS

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 Cassowary Coast Regional Council approved devices.

Cassowary Coast Regional Council Trade Waste Officer is available on 0447 794 153 or 4030 2295 to answer any queries on trade waste matters.

TABLE 1: GENERAL PRE-TREATMENT GUIDELINES FOR MINOR TRADE WASTE GENERATORS.

<u>MECHANICAL REPAIRS IN WORKSHOP</u>		
PROCESS	PRE-TREATMENT	HINTS
Parts washing with water	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, fitted with a first flush diversion system. 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. Wash designated, bunded area (segregated from rest of workshop)	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 with Solvents (preferred method)	Spent solvents to be removed off-site for regeneration or disposal. Area containing the parts wash to be bunded to contain any spillage or leakage. N.B. There is no discharge to Sewer	Read the MSDS for each of the materials being used

Floor wash down (Periodic)	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. N.B. The wastewater from wash down can drain to the same pre-treatment system as that used for parts washing.	Screen may be used to exclude Washers and nuts 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 spills should be soaked up prior to washing. Grease blobs should be scraped up Before washing.
Vehicle body repair shops (Wet rubbing)	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.	Interceptor to be serviced at regular intervals by a licenced contractor.
Washing of vehicle body Only. (No degreasing)	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 trap is required.	Interceptor to be serviced at regular intervals by a licenced contractor.
Vehicle detailing (De-greasing)	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.

PUMPS

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.

BUNDING

The area around all treatment installations must be bunded. There must be no spillage or overflow of trade wastewater influent or effluent, sludge or treatment chemicals to the stormwater or sewerage systems (by gravity or by automated mechanical means).

OIL ARRESTORS

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

N.B. In-ground oil arrestor grease silt traps are no longer acceptable

HOUSEKEEPING

"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 pretreatment stage.
- Use cleaning products that have a PH of between 7 -10 at working concentrations.

GENERAL PRE-TREATMENT REQUIREMENTS FOR THE FOOD INDUSTRY

PROCESS	PRE-TREATMENT	HINTS
All premises involved in cooking food	Grease arrestor. For sizing see table 2. Dry basket arrestors in floor wastes and sinks. Used oil and fat storage area to be roofed and bunded. Garbage can cleaning area to be roofed and bunded, wastewater to pass through a dry basket and discharged through a grease arrestor.	Grease arrestors to be serviced at regular intervals by a licenced liquid waste disposal contractor.
Food preparation only	Dry basket arrestors in floor wastes and in sinks. Grease arrestor in some circumstances as determined by the Trade waste officer.	Grease arrestors to be serviced at regular intervals by a licenced liquid waste disposal contractor.

GENERAL PRE-TREATMENT GUIDELINES FOR OTHER TRADEWASTE GENERATORS

Generator/Source	Characteristics of waste	General Pre-treatment requirements
Dental/Medical/Veterinary Surgeries		

No plaster casts	Solids	Bottle trap
Plaster casts	Solids	Plaster arrestor
X-rays	Rinse water and spent solutions via	Balancing tank after silver recovery. (refer photographic industry code of practice)
Photographic Waste Fast photos	Rinse water and spent solutions via	Balancing tank after silver recovery. (refer photographic industry code of practice)
X-rays		
Laundromats	Lint, temperature	Lint mesh screens 1mm mesh, cooling pit if temperature exceeds 38 degrees Celsius.
Hairdressing salons	Hair, soap, dyes etc.	No pre-treatment required
Hobby Clubs Discharge less than 200 litres per day	Suspended solids	No pre-treatment
discharge 200 – 1,000 litres per day	Suspended solids	Plaster arrestors, solids settlement pit, 1,000 litres, minimum of one hour retention time.
discharge over 1,000 litres per day	Suspended solids	
Kennels	solids	Dry arrestor pit, open area Controls, dry cleaning prior to washing down.
School Laboratory	Acid/alkali, chemicals	Sediment and neutralizing pit

N.B. Discharge from photographic processing and laboratories not to come in contact with copper pipes.

TRADEWASTE CATEGORIES

Council divides trade waste generators into three categories, these are;

- Category 1** Low strength/low volume dischargers
- BOD5 and suspended solids less than 600 mg/L
 - And or COD (Chemical Oxygen Demand) less than 600 mg/L
 - Volume less than 500 kL/annum

Approval to discharge required – Permit
Charge - flat fee.

- Category 2** Low strength/high volume dischargers
- BOD5 and suspended solids less than 600 mg/L
 - And or COD less than 600 mg/L
 - Volume greater than 500 kL/annum

Approval to discharge required – Permit
Charge – flat fee

- Category 3** High strength dischargers
- BOD5 and suspended solids greater than 600mg/L
 - And or COD greater than 600 mg/L
 - Volume – any

Approval to discharge required – Agreement between Council and both the owner (or Authorised agent) and the trade waste generator when the owner is not the generator.
Charge – Quantity and Quality charges on an annual load. Minimum fee applies.

**PRE-TREATMENT REQUIREMENTS
(Category two and Three generators)**

Category 2 and 3 generators will be assessed, on inspection, by the Trade Waste Officer and pre-treatment will be determined on an individual basis. Specific problem industries 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 Cassowary Coast Regional Councils sewer admission limits are met. This report will be forwarded to the Trade Waste Officer of the Cassowary Coast Regional Council for approval prior to any pre-treatment facilities being installed.

**Lez Smith
Trade Waste Officer
Cassowary Coast Regional Council
Mobile: 0447 794 153**

AUTHORISED PRE-TREATMENT DEVICE APPROVAL FOR COMMERCIAL PURPOSES.

Cassowary Coast Regional Council requires that before any filter grease unit is installed, the customer must provide a report by a hydraulic consultant that demonstrates that a conventional grease trap cannot be installed.

Installation of pre-treatment devices must meet Australian Standards, Occupational Health and safety Standards and Cassowary Coast Regional Council guidelines. Pre-treatment devices installed in the Cassowary Coast Regional 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	
C	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)
M	Epoxy coated mild steel
P	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

GREASE TRAPS AND GREASE EXTRACTORS.

AUTHORISED AS AT 28TH JULY 2009

MANUFACTURER & CONTACT DETAILS	SUPPLIERS ITEM & CAPACITY	GREASETRAP BOATSHAPED	GREASE EXTRACTOR OR OTHER	ABOVE OR INGROUND INSTALLATION	MATERIAL CODE
Aglass Pty Ltd www.aglass.com.au	AGL 1000 – 1000 L AGL 1500 – 1500 L AGL 2000 – 2000 L	YES	NO	BOTH	GRP
	AGL-500-GA-SL-A AGL-500-GA-SL-B Both fitted with Zabel A300/12 filter	NO	YES		
AJM Environmental Services Pty Ltd www.ajmenviro.com.au	GA1000SS – 1000 L GA1500SS – 1500 L GA2000SS – 2000 L GA3000SS – 3000 L GA4000SS – 4000 L GA5000SS – 5000 L	YES	NO	ABOVE GROUND	SS
BCP Precast 1800 804 134 www.bcp.com.au	GAP-01000 - 1000 L GAP-01500 - 1500 L GAP-02000 - 2000 L GAP-03000 - 3000 L GAP-04000 - 4000 L GAP-05000 - 5000 L	YES	NO	BOTH	C
Eclipse Environmental 02 9721 3071	GA1000S – 1000 L GA1500S – 1500 L GA2000S – 2000 L GA3000S – 3000 L GA4000S – 4000 L GA5000S – 5000 L	YES	NO	ABOVE GROUND	SS
	GA1000F – 1000 L GA1500F – 1500 L GA2000F – 2000 L GA3000F – 3000 L GA4000F – 4000 L GA5000F – 5000 L	YES	NO	BOTH	GRP
	DELTA 1 (8 mm thick FRP)	NO	YES	BOTH	P
FRP Technologies P/L 02 9673 5366	FA-1 GABS 1000 L 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	YES	NO	ABOVE GROUND	GRP
	FI-1 GABS 1000 L 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	YES	NO	IN GROUND	GRP
	Profile 1 with A300 filter	NO	YES	BOTH	GRP
Gebel Aquasafe 02 4722 9696	Aquasafe grease arrester with Zabel A300 filter	NO	YES	BOTH	P

sales@gebelaquasafe.co..au					
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GREASE TRAPS AND GREASE EXTRACTORS.

AUTHORISED AS AT 28TH JULY 2009

MANUFACTURER & CONTACT DETAILS	SUPPLIERS ITEM & CAPACITY	GREASETRAP BOATSHAPED	GREASE EXTRACTOR OR OTHER	ABOVE OR INGROUND INSTALLATION	MATERIAL CODE
Halgan Pty Ltd 02 9972 1355	Ecotec S100 Grease Extractor	NO	YES	BOTH	P
	Modular Grease Trap with SCD, 1000 L to 5000 L	NO	YES	BOTH	
Everhard industries 13 19 26	550 L 1000L 2000L	NO	NO	BOTH	C
Industrial Separation Systems (ISS) 02 9524 6654	VGS 1500 L/h grease separator (with mono pump CP25) VGS 2500 L/h grease separator (with mono pump CP800) <i>Note: products for installation in McDonald's Restaurants only</i>	NO	YES	ABOVE GROUND	SS
J B Collitt Pty Ltd 02 9773 8816	JBC1000 SS 1000 L JBC2000 SS 2000 L JBC3000 SS 3000 L JBC4000 SS 4000 L JBC5000 SS 5000 L	YES	NO	ABOVE GROUND	SS
John Lynch Engineering Pty Ltd 0412 649 860	1500 L 5000 L	YES	NO	ABOVE GROUND SELF SUPPORTING	SS
Mascot Engineering 02 9644 1044 1300885 295 sales@mascoteng.com.au	GA-100 1000 L GA-150 1500 L GA-200 2000 L GA-200T 2000 L GA-300 3000 L GA-400 4000 L	YES	NO	BOTH	G
Sepa Waste Water Treatment P/L 9525 4788	BS 10 1000 L BS 15 1500 L BS 20 2000 L BS 30 3000 L BS 40 4000 L BS 50 5000 L	YES	NO	ABOVE GROUND	SS
Stainless Metal Craft 02 4735 5666	GT-1 1000 L GT-1.5 1500 L GT-2 2000 L GT-3 3000 L GT-4 4000 L GT-5 5000 L	YES	NO	ABOVE GROUND SELF SUPPORTING	SS

OIL WATER SEPARATORS

AUTHORISED AS AT 28TH JULY 2009

MANUFACTURER & CONTACT DETAILS	SUPPLIERS ITEM	LITRE/HOUR	PUMP TYPE	MATERIAL CODE
All Pumps Sales and Service 02 9683 5555	KWIKFO KCPS –1000	1000	KDS 25-100 DIAPHRAM	P
	KWIKFLO KCPS-1500	1500	KDS 25-150 DIAPHRAM	
Baldwin Industrial Systems Pty Ltd 02 9545 2811	CPS MPAK –MPM-12 CPS MPAK –BMM-64/2/12 CPS MPAK –BMM-64/3/12 CPS VPAK –MPV-12 CPS VPAK –BMV-64/2/12 CPS VPAK –BMV-64/4/12	1000 L/h 2000 L/h 3000 L/h 1000 L/h 2000 L/h 3000 L/h	DS25 –diaphragm DS32 - diaphragm DS38 - diaphragm DS25 - diaphragm DS32 - diaphragm DS38 -diaphragm	P
Clearmake Pty Ltd 07 5455 6822	CB 1.0 SS - P vert. tube pack CL 1.5 SS - P vert. tube pack CL 3.0 SS - P vert. tube pack CL 1.5 SS –D vert. tube pack	700 L/h 700 L/h 1600 L/h 1140 L/h	CP11 RJ – mono CP11 RJ - mono CP25 RJ – mono CM 1000 –nitrile diaphragm	SS
Eclipse Environmental 02 9721 3071	Eclipse Hydroflow 1000S – fibreglass plates 3000S – fibreglass plates 5000S – fibreglass plates	1000 L/h 3000 L/h 5000 L/h	Eclipse DP25 - diaphragm Eclipse DP40 - diaphragm Eclipse DP50 - diaphragm	SS
FRP Technologies Pty Ltd 02 9673 5366	PTW OS15 - fibreglass plates PTW OS30 - fibreglass plates	1.5 kL/h 3.0 kL/h	Kwikflo K/SM 25 1380 L/h Kwikflo K/SM 32 2750 L/h	GRP
Industrial Separation Systems (ISS) 02 9524 6654	VGS V10P0F VGS V15P0F VGS V15P3F VGS V15P3A VGS V20P3A VGS V30P3A VGS V30S0F	1000 L/h 1500 L/h 1500 L/h 1500 L/h 2000 L/h 3000 L/h 3000 L/h	ASM DS/DT25 - diaphragm ASM DS/DT25 - diaphragm ASM DS/DT25 - diaphragm ASM DS/DT25 - diaphragm ASM DS32 - diaphragm ASM DS38 - diaphragm ASM DS38 – diaphragm	P, SS
	VGS V10P0FP VGS V15P3FP	700 L/h 1600 L/h	CP11 RJ - mono CP25 RJ - mono	
Mascot Engineering 02 9644 1044 1300885 295 sales@mascoteng.com.au	Mascot CFI 15 Mascot CFI 30	1500 L/h 2500 L/h	ASM DS25 – diaphragm ASM DS32 - diaphragm	GRP
Mike Miles Trade Waste 02 9672 4858	Marlin OS 15 Marlin OS 30	1.5 kL/h 3.0 kL/h	ASM DS25 – diaphragm ADM DS32 – diaphragm	GRP
Sepa Waste Water Treatment Pty Ltd 02 9525 4788	Sepa – SS 1500, ss plates Sepa – SS 3000, ss plates Sepa – SS 5000, ss plates	1380 L/h 2580 L/h 4200 L/h	DS or DT 25 - diaphragm DS or DT 32 - diaphragm DS or DT 38 - diaphragm	SS
Ultraspin Technology P/L 03 9872 5466	Ultraspin Oil/Water Separator OS 20 OS 35	1500 L/h 3500 L/h	(Air operated diaphragm) ARO 666-120-322-C ARO 666-170-322-C	SS

OTHER PRE-TREATMENT PRODUCTS

AUTHORISED AS AT 28TH JULY 2009

PRODUCT HEADINGS	SUPPLIERS ITEM	MANUFACTURER & CONTACT DETAILS
AVERAGING, MIXING, DILUTION AND COOLING PIT	Mascot Averaging, Mixing, Cooling and Dilution Pits (GRC) L8/C8-800L, L10/C10-1000L, L12/C12-1200L, L15/C15-1500L - AMDCL8-800L, AMDCL10-1000L, AMDCL12-1200L, AMDCL15-1500L	Mascot Engineering Group 02) 9644 1044 1300885 295 sales@mascoteng.com.au
BIOLOGICAL ADDITIVE	Grease Eradication System – GES	Environmental Biotech 02 9810 7179
BUCKET TRAPS	Blucher – <i>Floor Models:</i> 780.200.000.03s, 780.200.000.05s, 780.300.000.03s, 780.300.000.05s (Stainless steel)	Blucher (Australia) Pty Ltd 08 8374 3426
	Capper – <i>Sink Model:</i> SG1 (Stainless steel)	Cap Kay Corporation 02 9629 5404
	Everbright - <i>Sink Models:</i> SA-001, SA-002 (Stainless steel)	Everbright 0416 239 986
	Mascot - <i>Floor Models:</i> SBA-1A, SBA-2A (GRC)	Mascot Engineering Group 02 9644 1044 1300885 295 sales@mascoteng.com.au
	Club Stainless & Accessories - <i>Sink models:</i> SSBW, SSBW-1 (Stainless steel)	Rovumstil P/L trading as Club Stainless & Accessories 02 4587 9887
	SPS - <i>Floor Models:</i> BA100SS, R150SR-BT, Q150SR-BT, LG100SA-BT, 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, 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)	Speciality Plumbing Supplies 02 9416 8031
	Stainless Metal Craft - <i>Sink Models:</i> WSCK-1, ISW-50 <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)	Stainless Metal Craft 02 4735 5666
	Vinidex - <i>Sink Models:</i> 93000, 93010	Vinidex Pty Ltd 13 11 69

	<i>Floor Model: 93003</i> (Stainless steel)	
DRY ARRESTOR PIT	Mascot Dry Arrestor Pit, (GRC) Product No. S4 & S5	Mascot Engineering Group 02 9644 1044 1300885 295 sales@mascoteng. com.au

OTHER PRE-TREATMENT PRODUCTS

AUTHORISED AS AT 28TH JULY 2009

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