

Trade Waste



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Trade Waste Management Guidelines 2007



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WIDE BAY WATER CORPORATION
MANAGEMENT GUIDELINES - DISCHARGING TRADE WASTE TO SEWER

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1.0 INTRODUCTION

Wide Bay Water Corporation provides a sewerage system for the transport and treatment of domestic sewerage. Payment for this service is collected through the sewerage rate on each property.

Wide Bay Water must meet all legislative environmental requirements relating to the disposal and reuse of effluent and sludges 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.

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

However, Trade Waste may have an organic strength many times that of domestic sewage and may overload the treatment facility. Trade Waste may 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:

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

Wide Bay Water's basic 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.

Wide Bay Water may consider the acceptance of Trade Waste containing toxic or hazardous substances and non-degradable pollutants to sewer only after the waste has been pre-treated on site to ensure sewer admission limits are not exceeded.

Wide Bay Water may amend the content of these Guidelines from time to time to further our goals of environmental protection and equality

2.0 DEFINITIONS

Trade Waste

The wastes from any industry, business, trade or manufacturing premises, other than domestic sewage, prohibited substances or stormwater.

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.

Premises

Includes messuages, buildings, lands, easements and tenements of any tenure.

Owner

The person, who for the time being is entitled to receive rent of any land, or who, if the same were let to a tenant at a rack rent, would be entitled to receive the rent thereof: The term includes any lessee from the crown and any superintendent, overseer, or manager for such lessee.

Generator

Any person, owner, occupier, company or body whose activity produces or has the potential to produce Trade Waste.

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 Wide Bay Water.

Trade Waste Officer

A person appointed by Wide Bay Water to oversee the disposal of Trade Waste in accordance with Wide Bay Water's Trade Waste Policy and Management Guidelines 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.

3.0 WIDE BAY WATER CORPORATION: TRADE WASTE POLICY OBJECTIVES

The objectives of Wide Bay Water in controlling the discharge of Trade Waste to sewer are:

- To safeguard public health and the environment.
- To prevent harm or injury to sewerage employees.
- To safeguard the sewerage system against damage, blockage or surcharging.
- To exclude non-biodegradable and potentially harmful substances that may:
 - lead to non-compliance with the conditions of Wide Bay Water Corporations environmental authority issued by the EPA;
 - cause the treatment process to fail;
 - render effluent or sludges unacceptable for re-use or disposal;
 - cause any other detriment to the environment; or
 - cause physical damage to infrastructure;
- To equitably recover the cost of services to commerce and industry including the cost of conveyance, treatment and damage to the sewerage systems.
- To provide operational data on the volume and composition of industrial effluent to assist in the operation of the sewerage system and the design of augmentations or new sewerage systems.
- To encourage waste minimisation and cleaner production, including waste prevention and recycling.
- To promote water conservation.
- To assist Wide Bay Water Corporation meet its statutory obligations.

4.0 CONTROL OF TRADE WASTE/BREACHES OF RELEVANT ACTS AND BY-LAWS

These Management Guidelines are made pursuant to the Water Act 2000 and the Standard Sewerage Laws under the Act.

It is an offence under section 824 (Discharging certain materials) of the Water Act 2000 to discharge Trade Waste to the sewerage system without a Trade Waste Approval given under section 469 (Trade Waste Approvals) of the Water Act 2000.

Any person wishing to discharge Trade Waste to the sewerage system shall apply to Wide Bay Water for Trade Waste Approval. This Approval states the requirements, and conditions under which discharge is allowed.

It is illegal to discharge waste (including Trade Waste) other than uncontaminated stormwater to stormwater drainage.

A summary of legislation relevant to Trade Waste discharge to sewer is given in Appendix 1 for the benefit of applicants. This is not, nor is it intended to be, a complete listing of all legislation pertaining to the discharge of Trade Waste.

4.1 TERMINATION OF APPROVAL

A failure by the owner and/or generator to comply with conditions of their Approval or the requirements of any written notices issued pursuant to this Approval may result in the Approval being terminated by Wide Bay Water.

Terms and conditions of the Approval in respect of any matter occurring before the termination, including the payment of charges owing, shall continue to have force and effect after the termination of the Approval.

4.2 PENALTIES

Wide Bay Water may prosecute any person who commits a breach of the Water Act 2000 or the Environmental Protection Act 1994 and its subordinate legislation, or who refuses or neglects to comply with any direction or requirement of Wide Bay Water pursuant to the legislation. Penalties are set out in the legislation, and include substantial fines.

Wide Bay Water may recover the cost of repairing damage to the sewerage system from a person causing damage to the sewerage system by discharging a prohibited substance or in excess of the sewer admission limits.

5.0 SEWER ADMISSION STANDARDS

Any waste discharged to Wide Bay Water's sewerage system shall at all times comply with the Sewer Admission Standards as set out in Appendix 2 unless otherwise specified in the Approval. These standards are subject to periodic review. Untreated wastes can have undesirable impacts on the sewer and the Sewerage System. For more detailed information regarding these undesirable impacts refer to Appendix 4.

Wide Bay Water may, at its discretion, negotiate with a Generator to accept the discharge of Trade Waste to the sewerage system that exceeds the general limit parameters of the Sewer Admission Limits. Additional charges will apply for such parameters.

The sewer admission standards, unless otherwise specified in the Approval, are absolute maximums.

The dilution of Trade Waste with water to achieve compliance with the Sewer Admission Standards 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.

6.0 CHANGE TO THE PREMISE

The owner of the premises the subject of a Trade Waste approval shall notify Wide Bay Water in writing within 14 days of any change to the premises that affects the Trade Waste approval.

When the owner of the premises the subject of the Trade Waste Approval notifies Wide Bay Water of a change to the premises caused by the

- cessation of business, the owner of the premise shall also give Wide Bay Water verification that any pre-treatment

apparatus, no longer being used, has been cleaned out or serviced.

- sale of the business, the Trade Waste approval holder shall notify Wide Bay Water to ensure that current pre-treatment device's adequately treat the Trade Waste discharge. If they do not, upgrades must be made at this time.

7.0 DISCHARGE CATEGORIES

All Trade Waste accepted to the sewer will be classified according to the following four categories for the purposes of approval, control and charging:

Category 1 Low strength/low volume discharges

| Parameter | Requirement |
|------------------|----------------|
| BOD5 | < 300 mg/L |
| Suspended Solids | < 300 mg/L |
| COD | < 600 mg/l |
| Volume | < 500 kL/annum |

- Charge - flat fee
- Also includes Category 0 premises using more than 300kL/annum

Category 2 Low strength/high volume discharges:

| Parameter | Requirement |
|------------------|----------------|
| BOD5 | < 300 mg/L |
| Suspended Solids | < 300 mg/L |
| COD | < 600 mg/L |
| Volume | > 500 kL/annum |

- Charge – Flat fee plus Quantity charge on total annual flow

Category 3 High strength discharges:

| Parameter | Requirement |
|------------------|-------------|
| BOD5 | > 300 mg/L |
| Suspended Solids | > 300 mg/L |
| COD | > 600 mg/L |
| Volume | Any volume |

- Charge – Flat fee plus Quantity and Quality charges on total annual load

Acceptance of waste under any category is conditional on the Trade Waste meeting the Sewer Admission Limits (see Appendix 2) unless otherwise specified in the Trade Waste Approval.

It is the responsibility of the generator to install, operate and maintain best practice pre-treatment devices or processes to ensure sewer admission limits are not exceeded.

In the event of a significant change in the strength or volume of a waste approved under Category 1 or Category 2, the waste will be treated as a Category 3 waste for the purposes of charging and monitoring.

For a list of example Category 1 and 2 premises, and the common Pre-Treatment requirements, refer to Appendix 7. For a list of example Category 3 premises, refer to Appendix 8.

8.0 TRADE WASTE CHARGES AND FEES

Trade Waste charges to be levied in respect of Trade Waste for the ensuing financial year will be determined by Wide Bay Water resolution passed before or at the same time as the Budget in any financial year.

Trade Waste charges and fees for the current financial year are available from Wide Bay Water on request.

Accounts for Trade Waste discharge may be issued annually, half yearly or quarterly. Accounts for the Trade Waste charges shall be a debt due by the owner of the premises, and if not paid within the prescribed time after service of the demand, shall thereafter bear interest at such rate per centum per annum as shall be fixed by Wide Bay Water by resolution. The amount owing, including interest, shall be recoverable in the same manner as general rates and shall until paid be a charge on the land, and in addition may be recovered as a debt from any subsequent owner.

Trade Waste charges and fees for the current financial year are listed in Appendix 3.

8.1 TRADE WASTE CHARGES

Trade Waste is divided into three categories for charging purposes.

Charges are based on actual quality and quantity of discharge for the period, not on figures described in the Approval.

Non-compliance charges will be applied for premises that fail to meet the Sewer Admission Standards.

Charges will be levied as follows:

Category 1: Flat fee to cover administration, scheduled inspections and compliance testing no more than every three years.

Category 2: Flat fee to cover administration, scheduled inspections and compliance testing no more than once per year. Quantity charge on total annual volume of Trade Waste discharged to the sewer to be calculated as follows:

$C = Qk$ where C is the annual charge(\$)

Q is the annual volume(kL)

k is the unit charge rate (\$/kL).

The unit charge, k, is based on the cost of providing and maintaining the sewerage system for the total annual wastewater flow to the sewerage plant(s) including administration, scheduled inspections and compliance testing for Trade Waste control:

Category 3: Flat fee to cover administration, scheduled inspections and compliance testing. A Quantity and Quality charge on the total annual discharge of Trade Waste to the sewer to be calculated as follows:

$C = Qa + (Qx_1 n_1 / 1000) + \dots$ where

C is the total annual charge (\$)

Q is the total annual discharge volume (kL)

a is the unit charge for volume (\$/kL)

x_1, x_2 are the average concentrations for pollutant N1, N2 (mg/L)

n_1, n_2 are the unit charges for pollutants N1, N2 (\$/Kg)

N1, N2 are the pollutant to be charged for.

Charges shall be made for BOD₅, (or COD), suspended solids, oil/grease, and any other pollutant as determined by Wide Bay Water Corporation.

8.2 INSPECTION AND ANALYSIS FEES

Flat fees allow for routine inspections and sampling/testing of the Trade Waste premise by Wide Bay Water.

Additional inspection and testing fees, to be paid by the Owner (or Generator) on a sundry debtor basis, shall apply in all categories where more than the number of Wide Bay Water inspections and quality compliance tests allowed for under the Approval and covered by the minimum fee are required because of non compliance.

Samples for analysis may be collected as part of a contractual arrangement with the holder of a Trade Waste Approval. The full cost of all analytical fees shall be paid by the Owner (or Generator).

8.3 APPLICATION FEES

Application for an Approval to discharge under Categories 1, 2 and 3 shall be charged an application fee to cover the cost of processing the application, inspecting the premise and drawing up the Approval.

This fee must accompany the application.

8.4 SEPTAGE AND OTHER LIQUID WASTE FEES

Liquid waste transporters disposing of septic, portable toilet or other approved liquid waste to the sewer or sewerage treatment plant under approved conditions shall be charged on a on a calculated volume basis (\$/KL) which takes account of both volume and strength of waste.

8.5 ADDITIONAL CHARGE

Where Wide Bay Water agrees to accept to the sewer waste which has properties in excess of those defined in the General Limits (see Appendix 2) of the Sewer Admission Limits, an additional charge will apply for each agreed non-complying parameter. The formula for calculation shall be:

Charge = (Actual/approved)^d x charge rate (\$/kg) x kg pollutant

where:

- D is a constant to be determined by Wide Bay Water in its annual budget
- The minimum ratio for (actual/approved) is 1.0; and
- Approved means the sewer admission limit value or the other negotiated value defined in the Trade Waste Approval.

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

Exceeding the approved limit is an offence under the Water Act 2000.

9.0 APPLICATION PROCEDURES

The owner or authorised agent and the Trade Waste generator, shall apply to Wide Bay Water for a Trade Waste Approval if Trade Waste is generated or likely to be generated at Premises. Applications should be lodged prior to commencement of trading. Examples of appropriate times for lodging applications may include:

- during the processing of a Building Application for new premises or extensions of existing premises intended for industrial and/or commercial usage; or
- on the change in tenancy or ownership of such premises intended for industrial or commercial usage; or
- on the shop fit-outs of such premises intended for industrial or commercial usage;
- during the processing of an application to strata title such premises intended for industrial or commercial usage; or
- prior to generating Trade Waste at existing premises without Trade Waste approval; or
- where a change in process technology occurs that affects Trade Waste.

Application forms are available from:

Wide Bay Water Corporation – Reception Desk
29-31 Ellengowan St
URANGAN
HERVEY BAY 4655

or will be forwarded on request by telephoning 1300 808 888 or by writing to:

CEO - Wide Bay Water Corporation
PO Box 5499
Torquay
HERVEY BAY 4655

Applicants should seek advice from:

Terry Harris
Wide Bay Water Corporation
Tel: (07) 4194 7726

on how to complete the Form. Failure to provide all required information will result in delays in approvals.

Applications must include details of the proposed method of pre-treatment to be used to ensure waste meets sewer admission limits. Treatment plans should be forwarded with the application.

Any plumbing and drainage work associated with the installation of any treatment process shall be in accordance with the Standard Sewerage and Water Supply Laws.

Any plumbing and drainage work associated with installing any treatment process shall be in accordance with the Plumbing and Drainage Act 2002, the Standard Plumbing and Drainage Code (AS/NZS 3500) and the approved sewerage drainage plan for the Premises. The plumbing and drainage work shall be carried out by a licensed plumber and drainer.

Where a waste is deemed to be unsuitable for discharge to sewer, an Approval will not be issued and alternative arrangements for disposal of wastes will have to be made.

10.0 APPROVALS

10.1 CATEGORY ONE AND TWO APPROVALS

Both the Owner or Authorised Agent and the Trade Waste Generator (where the owner is not the Trade Waste generator) of a premise from which waste classified as Category 1 or Category 2 is being discharged, shall be issued with a written approval which shall remain in force for the specified period unless cancelled sooner.

Trade Waste Approvals are not transferable. The Trade Waste approval states the terms and conditions the Owner or Duly Authorised Agent and the Generator must observe to discharge Trade Waste into Wide Bay Water's sewerage. These include, but are not limited to:

- 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;
- the time when Trade Waste may be discharged;
- the period for which Trade Waste may be discharged;
- the method for the 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 and removal of waste from pre – treatment equipment, including the frequency of cleaning and the waste transporter to be used;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment;
- the powers of Wide Bay Water to enter premises in relation to any matter with regard to Trade Waste control;
- penalties for non compliance;
- any other conditions considered by Wide Bay Water to be appropriate.

10.2 CATEGORY THREE APPROVALS

Both the Owner or Authorised Agent and the Trade Waste generator, when the Owner is not the generator, of a premises from which waste classified as Category 3 is being discharged shall be required to negotiate a written Approval with Wide Bay Water. The Approval will remain in force until negotiated or cancelled.

Trade Waste Approvals are not transferable.

The Trade Waste Approval states the terms and conditions the Owner or Authorised Agent and the generator must observe to discharge Trade Waste to Wide Bay Water's sewerage. These include but are not limited to:

- the location of the premises and nature of the occupancy;
- quality of waste that may be discharged;
- quantity of waste that may be discharged;
- rate of discharge - maximum instantaneous, maximum daily;
- hours of day, days of week discharge is allowed;
- details of self regulation monitoring program
- 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 Wide Bay Water;
- 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 priority to entry to sewer;
- pre-treatment processes to be used;
- conditions for maintenance of and removal of waste from treatment equipment;
- records to be kept concerning the cleaning and maintenance of treatment equipment and disposal of waste;
- the powers of Wide Bay Water to enter premises in relation to any matter with regard to Trade Waste control;
- the obligation of the Owner or Authorised Agent and the Generator concerning any variations to operation or treatment processes that may effect discharge quantity or quality including change of business type;
- the obligation of the Owner or Authorised Agent and the Generator on termination of Approval by expiry, discontinuance of discharges, change of ownership or occupier, or non compliance with Approval conditions;
- the obligation of the Owner or Authorised Agent and the Generator with respect to payment of charges, fees and penalties;
- penalties for non compliance;
- any other conditions relevant to the particular discharge as agreed to.

11.0 INSPECTION AND MONITORING

11.1 INSPECTION CHAMBERS AND/OR GAUGING FACILITY

Category 3 wastes shall be discharged to Wide Bay Water's sewerage system via an open channel inspection chamber and/or gauging facility. The inspection chamber and/or gauging facility shall be located on the Trade Waste discharge line in an area which is accessible at all times by Wide Bay Water's Officers, thus allowing for sampling and/or monitoring equipment to be installed and operated.

For new Category 2 and 3 installations, the Trade Waste discharge line shall be separate from the domestic waste discharge line. For existing installations retrofitting is not required except where it may be done during any proposed upgrading or alterations to the installation.

Where a non-domestic premise does not have a Trade Waste discharge to Wide Bay Water's sewerage system, an open channel inspection chamber shall be installed on the house drain, in an accessible location, prior to leaving the property and/or connecting into Wide Bay Water sewer.

Arrester trap installations and other pre-treatment devices on Commercial Premises discharging under Category 1 or Category 2 conditions shall have an inspection opening provided externally to the building, within the premises, at ground level.

11.2 INSPECTION AND MONITORING

For the purpose of monitoring and auditing the conditions of discharge, Wide Bay Water may inspect all premises the subject of Trade Waste Approval. The frequency of inspections depends on the category the premise falls into, and can generally be considered to be:

- Category 1 – Inspections at least every three years
- Category 2 – Inspections at least every year
- Category 3 – Inspections at least twice a year

Inspections may include, but are not limited to the following:

- Checking chemical storage areas to ensure that they are properly banded and are not improperly connected to the sewerage system; and

- Checking that there are no illegal stormwater connections to the Trade Waste system or the sewerage system;
- Checking that there are no illegal Trade Waste connections to the sewerage system or stormwater drainage and that there is no potential for Trade Waste to overflow improperly to the sewerage system, stormwater drainage or waterways; and
- Checking that pre-treatment facilities are regularly and properly serviced and standby equipment is available where necessary; and
- Assessing work practices to ensure that they do not result in a breach of the Trade Waste Approval or legislation;
- Collecting wastewater samples for:
 - waste type reclassification
 - account calculation
 - audit process
 - pre-treatment equipment evaluation

Wide Bay Water Officers shall be permitted entry at all reasonable times and not obstructed from carrying out inspections.

12.0 DETERMINATION OF DISCHARGE QUANTITY

12.1 CATEGORY 1 AND 2

The volume of Trade Waste discharged shall be estimated from total metered water consumption, less an allowance for domestic waste based on 100 kL/annum per pedestal and an allowance for water consumed on the property.

Investigations have established a basis for estimation of the proportion of water consumption discharged as Trade Waste by various types of trade and manufacturing processes. These will form the basis of the initial fraction applied when an Approval is issued. Where there is no fraction available, 100% discharge will be assumed.

Where individual generators have information, which would indicate a departure from these bases, application may be made for reconstruction of the fraction used.

High volume Category 2 generators may, and are encouraged to, install an approved flow measurement device calibrated as specified in the Approval conditions.

12.2 CATEGORY 3

Volume of Trade Waste discharged to the sewer shall be measured by an approved flow measurement device calibrated as specified in the Approval. This should be located on the Trade Waste discharge stream, which should be separate from the domestic waste discharge stream.

Where the flow measured includes domestic waste, an allowance per pedestal shall be made. Generators exempt from installing a flow measurement device shall have the volume of discharge estimated.

13.0 DETERMINATION OF DISCHARGE QUALITY

13.1 CATEGORY 1 AND 2

Quality measurements for Category 1 and 2 discharges are required for compliance checks only. This shall be done by Wide Bay Water as part of the random Inspection and Monitoring program. The cost shall be covered by the annual Trade Waste flat fee except where additional inspection and testing is required because of non compliance.

13.2 CATEGORY 3

Quality measurements are required for both charging and compliance purposes. For charging purposes a system of monitoring by the discharger shall be used to collect sufficient data to enable the average mass load for the designated charging period to be calculated. Where pre-treated is required to meet sewer admission limits for specified parameters, monitoring will be required for those parameters to confirm satisfactory pre-treatment.

Where additional inspection and testing is required to be done by Wide Bay Water as a result of non compliance, Wide Bay Water shall charge the owner for this.

14.0 REMOVAL OF INDUSTRIAL LIQUID WASTE FROM PREMISES

No person shall discharge or cause to be discharged directly or indirectly to any sewer, wastes from any liquid transport vehicle without receiving an Approval from Wide Bay Water.

Removal of any regulated wastes from a premises shall only be carried out by waste transporters licensed in accordance with the Environment Protection Act 1994 and the Environmental Protection Regulation 1998 and transported, stored, treated or disposed of in accordance with the requirements of the Environmental Protection Regulation 1998 and the Environmental Protection (Waste Management) Regulation 2000. All Contractors shall be required to maintain records as prescribed by Wide Bay Water to account for all waste collected and disposed of within or outside the local council area.

Grease arrester and oil arrester waste shall not be disposed of to the sewerage system. Such wastes shall be disposed of in a manner and/or at a site approved of in accordance with the requirements of the Environment Protection Act 1994 and the Environmental Protection Regulation 1998 and operated in accordance with the requirements of the Environmental Protection (Waste Management) Regulation 2000.

Removal and disposal of sewerage and septic tank sludges shall only be done by a Wide Bay Water approved waste transporter. Such waste shall be disposed of into the sewerage system in accordance with Approval conditions.

All waste transporters shall be required to maintain records as prescribed by Wide Bay Water to account for all waste collected and disposed of within or outside Wide Bay Water boundaries.

Trade Waste charges will apply to all transported liquid and sludge waste approved for discharge to sewer.

Advice on the disposal of liquid waste not suitable for discharge to sewer may be obtained from

Environmental Services
29-31 Ellengowan St
URANGAN
HERVEY BAY 4655
Tel: 1300 808 888

15.0 ARRESTOR INSTALLATIONS

Where arrestors are used to pre-treat waste before discharge to sewer they will be of a design and capacity approved by Wide Bay Water. Appendix 6 outlines different methods for estimating the size of grease arrestors. The final determination of adequate capacity will be done by a Wide Bay Water Officer. Appendix 5 lists common Pre-Treatment devices and gives a brief explanation of each.

15.1 SPECIFICATIONS FOR PRE-TREATMENT DEVICES

In a situation where an arrestor is required for pre-treatment but can not be installed because of specific site constraints an additional charges will apply.

Where an arrestor is required to pre-treat waste before its discharge to sewer the arrestor shall be of an approved design and capacity.

Unless otherwise approved, all arrestors shall:

- Not be less than 1000 litres in capacity; and
- Not be more than 2000 litres in capacity, and
- Be vented with a 100mm diameter vent; and
- Have gas tight lids; and
- Be fitted with sample points with 100mm diameter brass access covers on the inlet and outlet of the arrestor; and
- Have a capacity below the invert of the outlet of the arrestor at least twice that total capacity of all the appliances and fixtures connected to the arrestor or, a larger capacity if required by Wide Bay Water; and

- Have a distance from the top of the arrestor to the outlet that is at least half the depth of the arrestor below the outlet invert; and
- Have an outlet invert level of the arrestor at least 50mm below the inlet invert level.

15.2 GREASE ARRESTORS (A.K.A. GREASE TRAPS)

The use of solvents, enzymes, bacterial bacteria, odour control agents or pesticides in grease arrestors is prohibited unless specifically approved by Wide Bay Water. Conditional Approval may be given to allow the generator to demonstrate to Wide Bay Water that the product to be used does not adversely impact on the sewerage system.

Where it is intended that several Trade Waste generators share the use of a grease arrestor, the following information is required to be clearly tabled on the plan submitted with the application for Approval:

- The size of the grease arrestor; and
- Details of the loading to be discharged by each Trade Waste generator; and
- The names of the businesses and shop numbers sharing the grease arrestor

Location of the grease interceptor trap shall be as close as possible to the location, and fixtures/fittings discharging waste into such trap, in an accessible where practicable, shall be located externally to the building so that maintenance and or cleaning can be carried out without causing a nuisance.

Maintenance cleaning of grease interceptor trap shall be carried out on a regular basis in accordance with conditions of the Approval by a Wide Bay Water approved Industrial Liquid Removal Contractor.

15.3 OIL ARRESTORS (A.K.A. OIL INTERCEPTORS)

Only "Quick Break Detergents" may be used on oil arrestor installations. Maintenance cleaning of grease interceptor trap shall be carried out on a regular basis in accordance with conditions of the Approval by a Wide Bay Water approved Industrial Liquid Removal Contractor

Removal of oily waste shall be done by a waste transporter licensed under the Environmental Protection Act 1994 and the Environmental Protection Regulation 1998. Appropriately sized mineral (petroleum) oil arrestors for the treatment of oily wastewater will be approved in most circumstances. Acceptable methods include:

- Coalescing plate separators; and
- Membrane technology; and
- Dissolved air floatation (DAF); and
- Chemical precipitation; and
- Triple stage interceptors.

Each application will be assessed on the nature of the oily waste to be treated, the proposed treatment method and the site location.

16.0 ENZYMES/MUTANT BACTERIA IN PRE-TREATMENT AREA

Enzyme and bacteria may be permitted for use in certain biological pre-treatment systems by way of specific application to Wide Bay Water. Conditional Approval may be given to allow the discharger to demonstrate to Wide Bay Water that the product to be used does not adversely impact on the sewerage system.

17.0 FOOD WASTE DISPOSAL UNITS

Food waste disposal units (garbage grinders/insinkorators) may be approved by specific application to Wide Bay Water. Where installation is approved, sampling of trade waste may be required to ensure trade waste charges cover the real cost of treating the wastes at a treatment plant.

18.0 MEDICAL, CLINICAL, VETERINARY AND INFECTIOUS WASTES

Solid wastes from any hospital, clinic, office or surgery of a medical or veterinary facility or laboratory, convalescent or nursing home or health transport facility; including, but not limited to, hypodermic needles, syringes, instruments, utensils, swabs, dressings, bandages, or any paper or plastic item of a disposable nature, or any portions of human or animal anatomy; shall not be discharged to the sewer.

Infectious or hazardous wastes deemed to pose a threat to public health and safety may not be discharged to the sewer without Approval of Wide Bay Water. Such wastes shall require treatment to render them non-infectious or non-hazardous prior to discharge. When approved for discharge, Trade Waste charges will apply.

Discharging liquid wastes including faeces and body fluids to sewer from any hospital, clinic, officer or surgery of a medical or veterinary facility or laboratory, convalescent or nursing home or health transport facility is permitted in accordance with the National Guidelines for Waste Management in the Health Industry 1999, National Health and Medical Research Council.

19.0 CONTAINMENT OF TOXIC\HAZARDOUS SUBSTANCES

Any potentially toxic or hazardous substances shall be stored in areas where leaks, spillages, or overflows can not be drained by gravity or by an automated mechanical means to the sewer or the stormwater system.

20.0 DISCHARGE OF LIQUID WASTES FROM RECREATIONAL VESSELS AND BUSES

The discharge 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 an Approval for discharge. Charges will be in accordance with the category classification.

The discharge of untreated bilge water to the sewer is prohibited.

The discharge of toilet water from buses, aircraft or other recreational vehicles may be permitted at approved discharge locations such as bus or transport depots, terminals, and caravan parks. The owner of the premises on which such facilities are located must hold an Approval and discharge must be in accordance with the Approval conditions.

Trade Waste charges in accordance with Appendix 3 for septic and other approved liquid waste will apply.

21.0 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 Approval from Wide Bay Water.

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

22.0 DISCHARGE FROM OPEN AREAS

The discharge of uncontaminated rainwater runoff 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 WBWB. However, there may be circumstances when it is environmentally beneficial to accept these wastes to the sewer under strict controls.

An Approval is required to discharge such waste. Controls will be required to ensure the discharge quality and quantity meet the requirements set by these management guidelines and will include:

- all such water is pumped to sewer at a rate acceptable to Wide Bay Water;
- measures to ensure the discharge to sewer ceases automatically after a predetermined level of rainfall volume (mm) and/or intensity (mm/hr);
- measure to collect, segregate and treat the "first flush" volume equivalent to 10mm X open area (m²), during wet weather with additional runoff directed to the stormwater system;
- 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.

23.0 DISCRETIONARY POWER

Notwithstanding the provisions of these management guidelines, given the complexity of many industrial wastes and the need to protect Wide Bay Water's sewerage system, staff and the environment, acceptance of any given Trade Waste to sewer shall always be at the discretion of Wide Bay Water.

24.0 REFERENCE TO WIDE BAY WATER

In these management guidelines, reference to Wide Bay Water means any person appointed or authorised by Wide Bay Water Corporation to act on behalf of Wide Bay Water Corporation as the case may require.

Trade Waste



Trade Waste Management Guidelines APPENDICIES 2007



APPENDIX 1

SELECTED LEGISLATION RELAVENT TO TRADE WASTE

- WATER ACT 2000
- PLUMBING AND DRAINAGE ACT 2002
- PLUMBING AND DRAINAGE REGULATION 2003
- STANDARD PLUMBING AND DRAINAGE REGULATION 2003
- ENVIRONMENTAL PROTECTION ACT 1994
- ENVIRONMENTAL PROTECTION REGULATION 1998
- ENVIRONMENTAL PROTECTION (WASTE MANAGEMENT) REGULATIONS 2000
- ENVIRONMENTAL PROTECTION (WASTE MANAGEMENT) POLICY 2000
- ENVIRONMENTAL PROTECTION (WATER) POLICY 1997
- LOCAL GOVERNMENT ACT 1993
- INTEGRATED PLANNING ACT 1997
- RADIATION SAFETY ACT 1999
- RADIATION SAFETY REGULATION 1999
- GENE TECHNOLOGY ACT 2001 (QUEENSLAND LEGISLATION)
- GENE TECHNOLOGY ACT 2000 (COMMONWEALTH LEGISLATION)

APPENDIX 2

SEWER ADMISSION STANDARDS

The upper limits for the quality of Trade Waste discharged to the sewer for all categories are set out below. These admission standards shall apply from 1.7.92. They are subject to periodic review.

1 GENERAL PROHIBITIONS

| Parameter | Concentration mg/L except * |
|------------------------------------|---|
| Temperature * | 38°C |
| PH * | 6 - 10 |
| Biological Oxygen Demand (BOD5) + | 600 |
| Chemical Oxygen Demand (COD) + | 1200 |
| Total Organic Carbon (TOC) + | 1200 |
| Suspended Solids + | 600 |
| Total dissolved solids (TDS) | 4000 |
| Total oil/grease | 200 |
| Gross solids | * Non-faecal gross solids shall have a maximum linear dimension of less than 20mm and a quiescent settling volume 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 Wide Bay Water's sewerage system. |
| Chlorine (as Cl ₂) | 10 |
| Sulphate (as SO ₄)# | 2000 |
| Sulphite (as SO ₂) | 100 |
| Surfactants - Amnionic (MBAS) | 500 |
| Aluminium (as Al) # | 100 |
| Iron (as Fe) # | 100 |
| Ammonia plus ammonium ion (as N) # | 100 |
| Total Kjeldahl (Total P) # | 50 |
| Manganese (as Mn) | 100 |

+ This total mass load and the capacity of the sewerage system to accept the load shall be considered for each application. # Wide Bay Water may in some circumstances accept waste containing higher concentrations of these substances. Additional Charges for treatment will apply.

2 PROHIBITED DISCHARGES

The following are prohibited discharges:

- Flammable/explosive substances
- Radioactive substances
- Pathological and infectious waste and Cytotoxic waste
- Genetically engineered organisms.
- Floodwater, rainwater and stormwater, and roof water, seepage water, subsoil water and surface water
- Solid or viscous substances in a quantity or size that can obstruct sewerage (eg. ash, sand, mud, metal, plastics, paper and rags)

3 SPECIFIC PROHIBITIONS - INORGANIC

| Parameter | Concentration mg/L |
|----------------------------|--------------------|
| Boron (B) | 100 |
| Bromine (Br ₂) | 10 |
| Fluoride (F) | 30 |
| Cyanide (CN) | 5 |
| Sulphide (S) | 5 |

4 SPECIFIC PROHIBITIONS - METAL

| Parameter | Maximum Concentration |
|---------------|-----------------------|
| Arsenic (As) | 5 |
| Cadmium (Cd) | 2 |
| Chromium (Cr) | |
| - Total | 20 |
| - Hexavalent | 10 |
| Cobalt (Co) | 10 |
| Copper (Cu) | 10 |
| Lead (Pb) | 10 |
| Mercury (Hg) | 0.05 |
| Nickel (Ni) | 10 |
| Selenium (Se) | 5 |
| Silver (Ag) | 5 |
| Tin (Sn) | 10 |
| Zinc (Zn) | 10 |

The concentration values apply to dischargers having daily mass load between the Lower daily Mass Load (LDML) and the Upper Daily Mass Load (UDML). For smaller discharges with a daily mass load below the LDML, no concentration limits apply. Dischargers who exceed Wide Bay Water'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.

5 SPECIFIC PROHIBITIONS - ORGANIC

Wide Bay Water may request specific demonstrable evidence based on degradability and toxicity concerning substances listed below.

| Parameter | Maximum Concentration mg/L |
|--|----------------------------|
| Formaldehyde (HCHO) | 50 |
| Phenolic compounds (as Phenol) | 100 |
| Pentachlorophenol | 5 |
| Petroleum hydrocarbon (non flammable) | 30 |
| Chlorinated hydrocarbons | 5 |
| Halogenated Aromatic Hydrocarbons (HAHs) | 0.002 |
| - Polychlorinated biphenyls (PCB) | 0.002 |
| - Polybrominated biphenyls (PBB) | 0.002 |

| | |
|--|-----|
| Polynuclear Aromatic Hydrocarbons (PAH) | 5 |
| Pesticides | |
| • General (insecticides/herbicides/ fungicides)* | 1.0 |
| • Organophosphates | 0.1 |
| • Organochlorines | |

+ This category covers all pesticides other than those specifically listed under organophosphate and organochlorine pesticides.

6 OTHER

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

APPENDIX 3

TRADE WASTE CHARGES FOR 05/06 FINANCIAL YEAR

Trade Waste charges for the 04/05 financial year are listed below. It is drawn to the attention of intending applicants that these charges are reviewed annually by Wide Bay Water as part of its budget. If the charges listed below are not those for the current financial year, applicants should obtain the correct charges by telephoning Wide Bay Water on 4197 4197.

I TRADE WASTE CHARGES

| | | |
|------------------|-----------|-------------------|
| Category 1 | Flat Fee: | \$215.00 / annum |
| Category 2 | Volume: | \$1.00 /kL |
| | Flat Fee: | \$ 280.00 / annum |
| Category 3 | Volume: | 65c /kL |
| BOD5 | | 78c /kg |
| Suspended solids | | 78c /kg |
| Flat fee: | | \$450.00 / annum |

II APPLICATION FEES

| | |
|---------------------------|---------|
| Approval – All Categories | \$75.00 |
|---------------------------|---------|

III INSPECTION FEES

These apply to additional inspections required as result of non-compliance.

| | |
|-----------------|---------|
| All categories: | \$75.00 |
|-----------------|---------|

IV TESTING FEES

These apply to additional analytical tests required as a result of non-compliance.

| | |
|-----------------|----------------------------------|
| All categories: | Full cost of laboratory charges. |
|-----------------|----------------------------------|

V SEPTAGE AND OTHER APPROVED LIQUID WASTE

| | |
|--------------------------|----------------|
| Volume charge all loads: | \$45.00 per kL |
|--------------------------|----------------|

VI NON COMPLIANCE CHARGE

| | |
|---|---------|
| Charge per kg of each non-compliant parameter | 73c /kg |
|---|---------|

APPENDIX 4

EFFECTS OF TRADE WASTE ON SEWERS

High Biological Oxygen Demand (BOD)

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

Suspended Solids

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

Grease and Oil

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

Low pH

- Causes corrosion of sewer structures.
- May cause the release of toxic hydrogen sulphide gas.

High pH

- Damages the sewer.
- May cause the release of toxic ammonia gas.

High Temperature

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

Heavy Metals

- Potentially toxic to treatment processes.
- Accumulate in biosolids and therefore limit its beneficial reuse.

Nutrients

- Small increase in levels of nutrients can cause nuisance algal growth in river systems. These algae consume the oxygen in waterways and therefore threaten fish and plant life.
- High levels of ammonia may cause unsafe conditions in sewer mains and pumping stations.
- Increase operational costs of sewage treatment plants.

Sulphur Compounds

- Sulphates can be reduced to sulphides and then cause odour and corrosion problems.
- Sulphites consume oxygen and may cause anaerobic conditions.

- Sulphides may result in the release of hydrogen sulphide gas and affect the safety of the personnel.

Flammable Substances

- Can cause fires and explosions in the system.

Cyanide

- Toxic to living organisms.
- May produce toxic gas in sewer.

Phenols

- Potentially toxic to biological treatment processes.

Chlorinated Solvents

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

Pesticides

- Limit the beneficial reuse of the STP effluent and sludge.

APPENDIX 5

COMMON PRE TREATMENT DEVICES

Balancing Pit/Mixing Tank

A pit or tank used to balance high strength discharge "peaks". Prevents "shock" loads of toxic substances discharged to the plant. Mixing of slightly acidic and alkaline wastes may bring the pH to a level acceptable for sewer discharge. Useful where small volumes of waste may be mixed to produce an acceptable effluent. Eg. Photographic processing

Cooling Pit/Tank

A pit or tank used to cool wastewater to 38°C or less prior to discharge to the sewer. Prevents high temperature discharges. Eg. Boiler blowdown

Dry Basket Arrestor (various types)

A pit or tank which is fitted with a fixed screen and removable mesh basket to capture large solids and fibrous material. Different types are available for different processes. Eg. Laundry, Food processing, Car / Truck Wash

General Purpose Pit

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

Grease Trap

An above ground tank or in ground pit which allows kitchen wastewater to cool and the grease to separate from the wastewater. When sizing the unit, due consideration should be given to the temperature and frequency of discharges. Minimum size is 1000 litres. Eg. All non-residential premises engaged in the cooking and preparation of food.

Petrol and Oil Interceptor

A system designed to separate non-emulsified oil and solids from the water. These systems are available in a variety of forms and are sized on an individual basis. Eg. Service stations, engine and parts wash, mechanical repairs.

pH Correction

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

Screen

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

Settling Tank

A tank used to settle solids prior to wastewater discharging to sewer. Tanks suitable for under sink use but may be enlarged for in-ground application. Eg. Plaster sinks, soil labs.

Solvent and Oil Interceptor

A pit, which allows solids to sink and grease/oil to float, thereby removing them from wastewater. Eg. Laboratory sinks, small degreasing troughs for parts washing, silk screen-printing.

APPENDIX 6

GUIDELINES FOR SIZING GREASE ARRESTORS

1. The capacity of a grease interceptor trap may be calculated from the following capacity allowances for various fixtures and fittings in Commercial Premises.

| Fixture/Fitting | Capacity (litres) |
|--|--------------------------|
| Commercial Kitchen Sink | 140 |
| Double Bowl or Pit Sink | 280 |
| Basin | 30 |
| Water Heated Baine Marie | 40 |
| Dishwasher | |
| - small (under bench) | 400 |
| - medium (upright) | 800 |
| - large (more than one outlet) | 1200 |
| Potato Peeler | |
| - small (bench) | 100 |
| - medium (upright) | 200 |
| - large | 400 |
| Steamer/Hydrotherm/Boiling | 100 |
| Pots/ Stock Pots | |
| Wok Burner | 140 |
| Mixing Bowl | 140 |
| Glass Washers (not in Liquor sales area) | 200 |

- or II: If 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:

| Serving capacity | Minimum size grease |
|-------------------------|----------------------------|
| 0 - 90 persons | 1000L |
| 91 - 200 persons | 1500L |
| 201 - 400 persons | 2000L |

APPENDIX 7

GENERAL PRE-TREATMENT GUIDELINES FOR MINOR TRADE WASTE
(WILL BE SATISFACTORY FOR MOST CATEGORY 1 AND 2 DISCHARGES)

| Generator/Source | Characteristics of waste | Minimum Pre-Treatment Required |
|--|---|---|
| Automotive/Engineering Industries: | | |
| Wreckers | Oil, grease, solids | oil interceptor ¹ |
| Detailing | Grease, oil, solids, detergents | oil interceptor ¹ |
| Engine/gear box reconditioning (small operation) | Lead, grease, oil, solids, detergents, kerosene | oil interceptor ¹ |
| Equipment Hire Company | Oil, grease, kerosene, solids, Detergents | oil interceptor ¹ |
| Lawn Mower Repairs | Oil, grease, grass, solids, detergents | oil interceptor ¹ |
| Mechanical Workshop | Oil, grease, kerosene, solids, Detergents | oil interceptor ¹ |
| Panel Beating/Spray Painting | Suspended solids, oil and grease | general purpose pit, oil interceptor ¹ |
| Service Stations: - work shop only - covered forecourt | Oil and grease Oil and grease | oil interceptor ¹ oil interceptor ¹ |
| Car Wash Areas - Residential: | | |
| - open areas | Oil, grease, solids, rain | silt trap, 1000 L minimum capacity |
| -roofed and bunded (to prevent storm water ingress) | Oil, grease, solids, | silt trap 1000 L minimum capacity |
| Car Wash Areas - Commercial: | | |
| - open areas | Oil, grease, solids, rain | Stormwater diversion pit, first flush collection pit "first 10mm of rain", oil separator ¹ , rainwater controls, measurement. |
| - roofed and bunded | Oil, grease, solids | oil interceptor ¹ |
| Radiator Repair (small operation) | Suspended solids, pH, toxic metals | pH adjustment prior solid settlement and pH adjustment before discharge to sewer; may require oil separation and metal precipitate removal. |
| Commercial Food Outlets: | | |
| Hot Bread, bakery Pies, cakes, pastries | Flour products, grease | Dry arrestor or removable basket in-floor waste collection; grease interceptor ² |
| Butcher, small, retail | Grease (washing floors and utensils) | fixed mesh screen and basket in sink and basins; grease interceptor ² |
| Chicken (fresh) retail Meat cutting and preparation | Grease | fixed mesh screens and baskets in-floor waste collection, mesh sinks and basins, grease interceptor ² |

| | | |
|---|---------------------------------------|---|
| Fish - fresh (no cooking) | Scales, fish gut | fixed mesh screen and basket in floor waste; dry arrester pit |
| Fish shop retail and cooking on site | Scales, grease | fixed mesh screen and basket in floor waste; screens in sink and basin; grease interceptor ² |
| Canteen/Cafeteria (with hot food preparation) | Grease | grease interceptor ² |
| Caterer | Grease | grease interceptor ² |
| Community Halls (food preparation) | Grease | grease interceptor ² |
| Sandwich/Coffee Shop - no hot foods prepared | Nil | no requirements |
| Sandwich Bar with hot food take-away | Grease | grease interceptor ² |
| Coffee Shop hot food prepared and served | Grease | grease interceptor ² |
| Take Away food outlets | Grease | grease interceptor ² |
| Take Away food outlets Large outlets eg. McDonalds, Pizza Hut, Kentucky Fried, BBQ and Charcoal Chicken etc. | Grease | grease interceptor ² |
| Commercial Kitchen | Grease | grease interceptor ² |
| Hospital Kitchens | Grease and oil, high temperatures | Grease interceptor, capacity to cool hot discharge water to less than 38°C |
| Nursing Homes/ kitchen | Grease/solids | grease interceptor ² |
| Restaurant | Grease | grease interceptor ² |
| Hotel with counter lunches/restaurant | Grease | grease interceptor ² |
| Motel, kitchen/ restaurants | Grease | grease interceptor ² |
| Boarding Houses/ kitchen | Grease | grease interceptor ² |
| Bistro | Grease/oil | grease interceptor ² |
| Ice Cream Parlour - with hot food, take away | Grease | grease interceptor ² |
| Shopping Centres preparation | Grease and solids | grease interceptor ² |
| Supermarkets - incorporating butcher and/or bakery | Grease and solids Grease and flour | grease interceptor ² grease interceptor and basket traps; dry arrester pit or basket in-floor waste collection |
| Other Commercial/Service Industries: | | |
| Garbage Can Cleaning units/ hotels/restaurants | grease/solids | fixed screen over floor waste, if grease interceptor installed, waste to pass via interceptor |
| Hairdressing Salon | No threat | no pre-treatment, avoid discharge through grease interceptor |
| Hobby Clubs - < 200L per day | suspended solids | no pre-treatment |

| | | |
|---|---|---|
| - 200L-1000L per day - > 1000L per day | suspended solids suspended solids | plaster arrester solids settlement pit 1000L, min of 1 hour retention |
| Dental/Medical/Veterinary Surgeries: - no plaster casts - plaster casts - x-rays | Solids Solids Rinse water and spent solutions | bottle trap plaster arrester to sewer via balancing tank after silver recovery |
| Photographic waste - Fast Photo - X-rays | Rinse water and spent solutions | to sewer via balancing tank after silvery recovery |
| School-Home Science, Tuck Shops (hot food) - laboratory | Grease Acid/alkali, chemicals | grease interceptor ² sediment and neutralising trap |
| Optical (>200L/day) | Suspended Solids | bottle trap under sink |
| Laundromat | Lint, temperature | Lint screens 1mm mesh: cooling pit if temperature 38°C (washing machine internal screens acceptable) |
| Kennels | solids | dry arrester pit; open area controls |

NOTES

¹ Oil interceptors should be of the coalescing plate type minimum capacity 1 kL/hour; use only quick break detergents (detergent used for cleaning by emulsifying oils and grease then quickly breaking the emulsion formed in less than 1 hour to allow separation of the oil from the water).

² Minimum size for grease arresters is 550 litres. For guidelines for sizing of grease arresters see **Appendix 2**.

APPENDIX 8

POTENTIAL CATEGORY 3 PREMISE LIST

Food/Beverage Industries

- Fruit/vegetable processing (canning, freezing, juicing)
- Meat Processing/small goods manufacturing
- Abattoirs - Meat/poultry
- Rendering
- Sea foods
- Dairy products
- Restaurants
- Wineries/distilleries
- Soft drink/cordial manufacturing
- Confectionary
- Baking (bread, biscuits, pastries etc)
- Grain milling
- Oil seek/oil extraction
- Fermentation/yeast
- Fish & chips shops
- Take away shops
- Cafe
- Hotels
- Hospitals
- Nursing Homes
- Laundries

Chemical Related Industries

- Chemical manufacturing - general (organic and inorganic)
- Soap, detergent and associated product manufacturing/formulating
- Explosives
- Pharmaceutical/cosmetics
- Fertilisers
- Pesticides/herbicides
- Plastics
- Resins, Adhesives/latex
- Paints/varnishes/lacquers
- Fibreglass
- Rubber - natural/synthetic

Apparel / Textile

- Tanneries
- Textiles (wool, cotton, synthetics)
- Industrial / commercial laundries

Services

- Laboratories - scientific and pathology
- Electrical manufacturing/processing
- Electronics
- Industrial/commercial wash areas - car, bus, truck, stables, garbage collection, Power generation
- Repackaging activities
- Industrial/commercial storage areas/warehouses
- Recyclers

Materials

- Paper and Cardboard processing/manufacturing
- Printing/publications, graphic arts/photographic (large scale)
- Cement
- Asphalt/Bitumen
- Glass/ceramics manufacturing

Metals

- Mining/Minerals industries smelting/refining foundries
- Electroplaters/galvanisers
- Metal finishing
- Fabrication and Powder coating

Automotive / Engineering / Petroleum

- Petroleum refining
- Waste oil refining





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