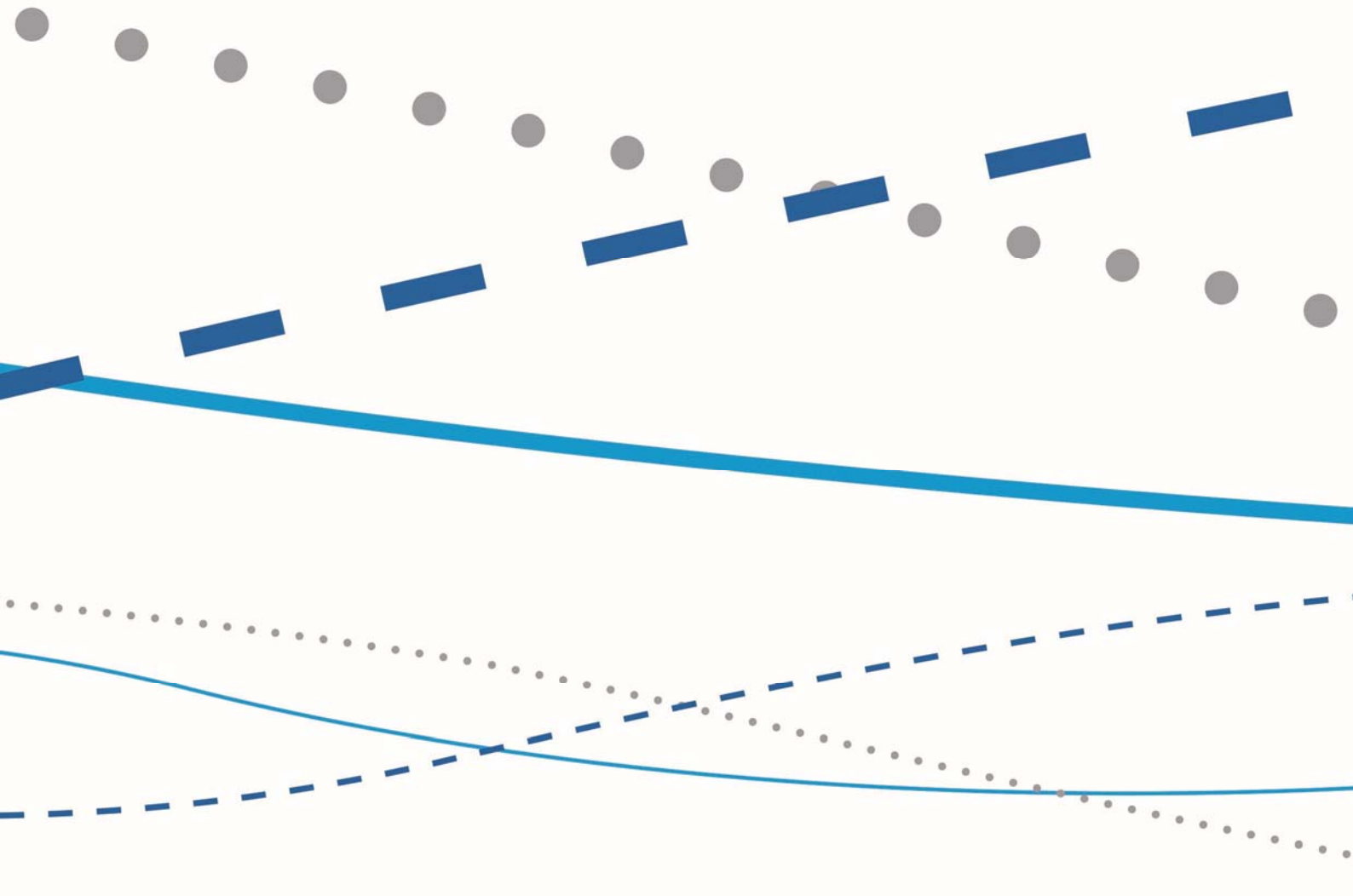
Trade Waste Environmental Management Plan

TWEMP



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1. INTRODUCTION

Liquid wastes generated by industry, small business and commercial enterprises are referred to as trade waste. The ***Water Supply (Safety & Reliability) Act 2008*** prohibits the unauthorised discharge of wastes, other than domestic sewage, into the sewerage system. The options for producers of trade waste are to:

- have it treated at an approved treatment facility;
- obtain approval from Council to discharge to the sewerage system; or
- obtain an environmental authority under the Environmental Protection Act to treat the waste before discharge to the environment.

Whitsunday Regional Council (Council) provides a sewerage system primarily for transporting and treating domestic sewage. Payment for this service is collected through sewerage charges on each rateable property. This system may also be used, with the approval of Council, for the acceptance and treatment of trade waste. As trade waste imposes an additional load on the sewerage system, and hence an additional cost for treatment, trade waste charges apply.

Domestic sewage consists mostly of liquid which, after treatment to reduce biodegradable material, suspended solids and nutrients, can be disposed of in accordance with its environmental authority requirements. Where practical and cost effective, Council is actively seeking opportunities to reuse and recycle treated effluent and bio-solids.

The organic concentration of trade waste can be much greater than that of domestic sewage and may overload the treatment facility. Trade waste may also contain substances such as hydrocarbons, fats and grease, heavy metals, organic solvents and chlorinated organic substances in high concentrations, which sewerage systems are not designed to treat. These substances may:

- pose a serious risk to the safety and health of sewerage workers;
- damage sewerage system infrastructure;
- inhibit biological processes at the treatment plant;
- accumulate in bio-solids, making their reuse difficult or impracticable; or
- pass through the plant untreated resulting in environmental contamination and / or impact on Council's reuse customers.

To ensure the continued protection of our environment and waterways, Council will accept, subject to conditions, biodegradable waste into the sewerage system provided:

- the system has adequate capacity to effectively collect, transport and treat the waste; and
- the trade waste generator/approval holder has applied (to Council's satisfaction) all practicable and cost-effective waste minimisation, recycling and reuse options.

Discharge of waste containing substances in amounts liable to be toxic or hazardous to the sewerage system, treatment process, personnel or the environment is prohibited.

Council may consider accepting trade waste containing toxic or hazardous substances and non-degradable pollutants only after the waste has been pre-treated by on-site "best practicable treatment" to ensure Sewer Admission Limits are not exceeded.

2. DEFINITIONS

Approval Holder

A person to whom Council gives a Trade Waste Approval (property owner).

Approval/Permit

Council's written approvals for the discharge of liquid waste are classified as Category 1, 2 or 3. It states the terms and conditions to be met by the trade waste Generator and/or Owner with respect to the discharge of trade waste into Council's sewerage system.

Annual Trade Waste Approval Fee

Means a utility charge for a category of trade waste for the cost to the Council of:

(a) administration associated with the provision of the Trade Waste service; and
(b) routine inspection and testing of premises the subject of a Trade Waste Approval; and
(c) routine reading of Trade Waste meters; and
(d) routine tracking and validation of Trade Waste.

Arrestor

An apparatus designed to intercept and retain silt, sand, oil, grease, sludge and other substances in a waste discharge.

Applicant

See Owner

Authorised Agent

Registered real estate agent or licenced solicitor appointed by the Owner to act on their behalf. Notification of such appointment is to be lodged in writing with Council.

Base Charge

A base charge is a fee for each application on a property to recover the costs associated with Council administration service.

Best Practice Environmental Management

Best Practice Environmental Management of an activity is the management of the activity to achieve an on-going minimisation of the activity's environmental harm, through cost-effective measures assessed against the standards currently used nationally and internationally for the activity.

Bi-annual Volumetric Consumption Charge

A bi-annual utility charge for the sewerage service provided by Council to the relevant property.

Biochemical Oxygen Demand

Biochemical Oxygen Demand or BOD^5 is defined as the amount of oxygen utilised by micro-organisms in the process of decomposition of organic material in wastewater over a period of 5 days at 20°C. In practical terms, BOD^5 is a measure of the biodegradable organic content of the waste or more simply the 'organic strength' of the liquid.

Bio-solids

The treated solids (sludge) mainly organic, produced by sewage treatment processes at a Council Sewage Treatment Plant.

Chemical Oxygen Demand

This is a measure of the oxygen required to oxidise organic material in wastewater by a strong chemical oxidant. COD is a measure of the organic and inorganic content, both biodegradable and non-biodegradable, of the waste, or more simply, the organic and inorganic strength of the liquid.

Cleaner Production

Cleaner Production means the continuous application of an integrated preventative environmental strategy to processes, products and services to increase efficiency and reduce risks to humans and the environment.

Commercial Swimming Pool

For the purpose of this policy 'Commercial Swimming Pools' refers to;

- Commercial pools
- Institutional facility pools,
- Municipal facility pools
- Commercial ornamental fountains and ponds.
- Commercial spas

Conveyance and Treatment Charge

means a utility charge for the cost to Council of conveying and treating the quantity and quality of Trade Waste discharged to the Sewerage System. This includes maintenance and depreciation of fixed infrastructure used in the provision of the trade waste service.

Council

In this plan a reference to Council means the Whitsunday Regional Council or any person appointed or authorised by the Whitsunday Regional 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, kitchen & laundry troughs, sinks, baths, showers & basins and similar fixtures designed for use in private dwellings.

Effluent

The liquid discharged following a wastewater treatment process.

Generator

See trade waste generator.

Heavy Metals

Metals of high atomic weight, which in certain concentrations can exert a toxic effect.

Human Waste

Human faecal substances and urine.

Open Area

This refers to any unroofed process, wash down, storage or similar area that has a drain or discharge connection to the sewerage system.

Owner

The property owner of the premises upon which the trade waste is generated.

Property Owner

Owner of land as defined in the *Local Government Act 2009*.

pH (stands for "potential of Hydrogen")

This is the measure of acidity or alkalinity of the wastewater. pH 7 is neutral, below 7 is acidic and above 7 is alkaline.

Premises

A lot as defined in section 10 of the *Sustainable Planning Act 2009*, or for a lot under the *Body Corporate and Community Management Act 1997* or the *Building Units and Group Titles Act 1980* – the common property for the lot.

Pre-treatment

Primary or secondary on-site treatment prior to discharge to Council's sewer.

Prohibited Substances

A substance prescribed in Schedule 1 of the *Water Supply (Safety & Reliability) Act 2008* and section 79 (4) of the *Local Government Act 2009*.

Quick Break Detergents

Detergents which emulsify oil and grease then break the emulsion in less than one hour.

Recycling of Wastewater

- Reuse of wastewater in the process that generated it; or
- Reprocessing the wastewater to develop a new product; or
- Using the wastewater (whether on or off the site where it is generated).

Regulated Waste

Non–domestic waste as mentioned in Schedule 7 of the *Environmental Protection Regulation 2008* (whether or not it has been treated or immobilised) and includes:

- For an element – any chemical compound containing the element; and
- Anything that has contained the waste.

Residuals

The solids that are removed from wastewater by treatment. Bio-solids are particular residuals.

Sewage

The wastewater from the community including all faecal matter, urine, household and commercial wastewater that contain human waste.

Sewer Admission Limits

Refer to Appendix 2

Sewerage or Sewerage System

Means Council sewer, access chamber (i.e. manhole), vent, engine, pump, structure, machinery, outfall or other work used to receive, store, transport or treat sewage.

Storm Water Drainage

A drain, channel, pipe, access chamber (i.e. manhole), structure, outfall or other work used to receive, store, transport or treat storm water.

Suspended Solids

Suspended solids refer to the insoluble solid matter suspended in wastewater that can be separated by laboratory filtration and is retained on a filter.

Total Dissolved Solids

Total dissolved solids refer to dissolved organic and inorganic matter and salts dissolved in wastewater.

Total Hydrocarbons

Petroleum based residues from industrial cleansing products and other sources.

Trade Waste

The waterborne waste from business, trade or manufacturing property, other than:

- Waste that is a prohibited substance; or
- Human waste; or
- stormwater.

Trade Waste Contract

Trade waste approval for the discharge of liquid waste classified as Category 3 or medium to high risk. It states the terms and conditions to be met by the trade waste generator and the owner of the property where the discharge of trade waste enters Council's sewerage system.

Trade Waste Approval

Written approval by Council for a person to discharge trade waste to Council's sewerage system. See Trade Waste Contract and Trade Waste Permit.

Trade Waste Characteristic

Measurable component of the trade waste discharge.

Trade Waste Generator

A person whose activity produces or has the potential to produce Trade Waste.

Trade Waste Officer

Trade waste officer means a person holding appointment as a trade waste officer of Whitsunday Regional Council.

Trade Waste Permit

A document provided by Council for a person to discharge trade waste to Council's sewerage system. See Trade Waste Contract and Trade Waste Permit.

Waste Minimisation:

Procedures and processes implemented by industry and business to modify, change, alter or substitute work practices and products that will result in a reduction in the volume and / or strength of waste discharged to Council's sewer. These actions are supported and encouraged by Whitsunday Regional Council and will reduce the charges that are applied for trade waste disposal to sewer, they will also reduce the loading on the treatment plant processes, thereby improving the quality of effluent discharged to the environment from Council's sewage treatment plants.

3. TRADE WASTE MANAGEMENT PLAN

3.1 Purpose

The purpose of this Management Plan is to provide an environmentally sustainable liquid waste disposal service for commercial and industrial waste in a manner, which safeguards public health and environment, and is consistent with Council's responsibilities and obligations under Queensland legislation.

3.2 Objectives

The objectives of the Management Plan are:

- To transport, treat and dispose of liquid waste in an environmentally sustainable manner;
- To prevent harm or injury to sewerage employees;
- To safeguard the sewerage system against damage, blockage or surcharging;
- To provide effluent of a quality suitable to be reused in industrial processes and future customers;
- To exclude non-biodegradable and potentially harmful substances that may:
    - Lead to non-compliance with the conditions of Council's environmental authority issued by DEHP;
    - Cause the treatment process to fail;
    - Interfere with recycling effluent;
    - Render effluent or bio-solids unacceptable for reuse or disposal;
    - Cause physical damage to infrastructure; or
    - Cause any other detriment to the environment.
- To equitably recover commerce and industry trade waste service costs including: conveyance, treatment and disposal, maintenance and repairs;
- To improve operation and planning for the sewerage system by understanding the composition and volume of discharges;
- To encourage waste minimisation and cleaner production, including waste prevention, recycling, and pre-treatment;
- To promote water conservation;
- To assist Council to meet its statutory obligations;
- To conform with the National Water Quality Management Strategy: Guidelines for Sewerage Systems - Acceptance of Trade Wastes (Industrial Wastes) November 1994, produced by the Agriculture and Resource Management Council of Australia and New Zealand, and the Australian and New Zealand Environment and Conservation Council.

3.3 Management Plan Instruments

The objectives will be achieved using a combination of Management Plan instruments, including:

- Sewer Admission Limits (concentration/mass limits for severable wastes);
- Conditional Trade Waste Approvals (Permits and Contracts);

- "User pays" pricing; and
- Effluent improvement programs.

4. CONTROL OF TRADE WASTE

4.1 Head of Power

Council is required to meet conditions of licences issued by the Department of Environment and Science (DES) for its sewerage systems including the disposal and reuse of treated effluent and bio-solids. Council is also required by the *Water Supply (Safety & Reliability) Act 2008* and the *Environmental Protection Policy 2009* (EPP Water) to fully assess the effect of trade waste on the sewerage system and the environment before issuing a Trade Waste Approval.

Under the Environmental Protection Act, Council is responsible for any pollution from stormwater outfalls under its control. The discharge of trade waste to stormwater is prohibited under the *Local Government Act 2009*. The storm water system must only be used for the disposal of uncontaminated storm water runoff.

Legislation relevant to the control of Trade Waste and the acceptance of Trade Waste to the Sewerage System is listed in Appendix 1. The list of legislation in Appendix 1 is not a complete list of all legislation relating to the control of Trade Waste.

It is an offence under section 193 (Discharging particular materials) of the *Water Supply (Safety and Reliability) Act 2008* to discharge Trade Waste to the Sewerage System without a Trade Waste Approval given by the Council under section 180 (Trade Waste approvals) of the *Water Supply (Safety and Reliability) Act 2008.* Any person wishing to discharge Trade Waste to the Sewerage System shall apply for a Trade Waste Approval.

It is an offence for a person to discharge waste (including Trade Waste) other than uncontaminated stormwater to Stormwater Drainage.

Plumbing and drainage work associated with any treatment process shall comply with the *Plumbing and Drainage Act 2018* and the *Standard Plumbing and Drainage Regulation 2019* and the Plumbing Approval. Plumbing and drainage work must be carried out by a licenced person.

Under Section 193 the *Water Supply (Safety and Reliability) Act 2008 it* is an offence to:

- 193(1) Discharge trade waste into council's infrastructure without approval.
- 193(2) Discharge a prohibited substance into council's infrastructure.
- 193(3) Discharge water from an ornamental pond, pool or the filtration system from a swimming pool without written approval from the service provider.

Under the State Penalties Enforcement Act 1999:

- These offences are infringement notice offences for which an infringement notice fine may be issued (Schedule 1 of the State Penalties Enforcement Regulation 2014).
- If an authorised person reasonably believes a person has committed an infringement notice offence, the authorised person may serve an infringement notice on the person for the offence.

5. TRADE WASTE APPROVALS

Council approval must be obtained before Trade Waste is discharged from any property to the Sewerage System. Responsibility for compliance with the Trade Waste Approval conditions and this Trade Waste Environmental Plan (TWEMP) resides with the Property Owner. It is the responsibility of the Property Owner to obtain approval through Council's approval process. It is also the responsibility of the property owner to pay any costs involved in obtaining and keeping approvals current.

5.1 Application for trade waste approval

The Owner of the premises and infrastructure (the applicant) from which Trade Waste will be discharged into the Sewerage System must make written application for approval to discharge. The applicant will be the Owner of the land or the owner's Authorised Agent, acting on behalf of the landowner. A Trade Waste application must be submitted by the Property Owner or Authorised Agent to obtain Council's approval for any trade waste discharge to sewer.

In the case of multiple businesses operating from a single strata titled property, each business is required to be separately approved based on an assessment of the application and activity proposed.

In the case of Community Title Scheme (CTS) land or strata title land, the owner of

each lot within the CTS in which trade waste is generated and discharged to sewer

must apply individually for a Trade Waste Approval.

Trade waste customers are divided into three categories

- Category 1 (Low volume)
- Category 2 (Low/Medium volume)
- Category 3 (High volume)

Council grants two types of approval:

1. Businesses that discharge trade waste of a consistent quantity and quality that can be easily pre-treated using standard technologies such that the risk to Council's sewerage system is generally low (typically issued in Permit form).

2. Businesses that discharge trade waste with a quantity and quality categorised as medium to high risk that may have a serious detrimental effect on Council's sewerage system (typically issued in Contract form).

5.2 Application Procedures

Applications must be lodged prior to commencement of trading. Examples of when applications need to be lodged include:

- during the processing of a building application for new premises or extensions intended for industrial and/or commercial usage;
- change in tenancy of such premises;
- change of ownership of such premises;
- shop fit-outs of such premises;
- during the processing of an application to strata title such premises;
- existing premises where trade waste is generated and no Trade Waste Approval has been issued;
- immediately following a request from Council to obtain trade waste discharge approval; or
- where a change in process technology occurs.

Where a new business has taken ownership of an existing business, a new Trade Waste application fee is required.

Application forms may be downloaded from Council's website, www.whitsundayrc.qld.gov.au. or obtained from Whitsunday Regional Council by telephoning 1300 972 753.

The Trade Waste Officer can give advice on the approval type, pre-treatment options and other application requirements.

Contracts must be negotiated with Council. All applications submitted must be accompanied by:

- the application fee
- details of the proposed method of pre-treatment.
- hydraulic design drawings.
- any other relevant information requested by Council

5.3 Approval & Contracts

5.3.1 Approval Conditions

A new application and approval is required for all new applicants and fees will apply. Trade Waste Approvals are non-transferable.

The Approval contains terms and conditions, which include but are not limited to:

- Property Owners details;
- the location of the premises and nature of the occupancy;
- the type and composition of Trade Waste that may be discharged;
- a statement that the quality of waste shall comply with Council's Sewer Admission Limits as specified in Appendix 2 (or attached to the Approval) and details of any allowed variations;
- 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 estimating or measuring discharge volume;
- provisions for measuring and sampling 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 waste transporters to be used;
- records to be kept on site concerning the cleaning and maintenance of pre-treatment equipment;
- any other conditions considered by Council to be appropriate.

Trade Waste Approvals must be renewed on an annual basis to update any relevant information about the business and/ or Trade Waste discharge.

Renewal forms will be sent out annually. The renewal forms must be completed and returned to Council by the due date. If renewal forms are not returned to Council by this due date the Trade Waste Approval may become invalid. A new application will be required to be submitted at full cost to the Property Owner.

Charges will be included on the Property Owners rates charges biannually.

Approval from Council is to be obtained before any changes or variations to the Trade Waste Approval are made.

5.3.2 Breaches of a trade waste approval

A Trade Waste approval may be suspended or cancelled under Section 182 of *Water Supply (Safety & Reliability) Act 2008 for* breaches on the conditions of an Approval. Where a Trade Waste Approval holder or Occupier becomes aware of a breach, or has the potential to breach the conditions of a Trade Waste Approval, the approval holder or Occupier must advise council:

- by telephone immediately as they become aware of the breach; and where requested:
- in writing, within timeframe set by council, setting out –
    - the nature of the breach or potential breach
    - an explanation of the cause of the breach or potential breach
    - trade waste effluent analysis results and/or flow measurements (if relevant)
    - actions that have been taken to control the non-compliant discharge

- what action is proposed to prevent its recurrence.

If conditions of a Trade Waste Approval are not being adhered with, or a person is contravening a relevant clause of the *Water Supply (Safety & Reliability) Act 2008*, or any other relevant law, Council may issue a remedial notice to the owner of the property to take action to remedy the non-compliance issue, in accordance with the Conditions of approval, for example, a remedial notice might require:

- a Trade Waste Approval holder to have a pre-treatment device serviced and/or maintained
- an Occupier or Owner of premises to remove any equipment that allows unauthorised trade waste discharges to council's infrastructure.

Council may also issue show cause notices and enforcement notices to address any breaches.

Depending on the nature and severity of the breach, council may also cancel or suspend the approval (see section 5.4).

Furthermore, nothing in this Management Plan derogates from or limits Councils rights and powers under the legislation to investigate or prosecute breaches of the legislation.

5.3.3 Contracts

Where the trade waste generated on site is assessed by Council as being medium to high risk, the property owner may be issued with a written Trade Waste Contract.

The Contract shall remain in force for the specified period unless cancelled sooner.

Trade Waste Contracts are not transferable.

The Contract states the terms and conditions that will include but are not limited to:

- Property Owners details;
- the location of the premises and nature of the occupancy;
- quality of waste that may be discharged;
- a statement that the quality of Trade Waste shall comply with Council's Sewer Admission Limits as specified in Appendix 2 of the TWEMP (or attached to the Contract) and details of any allowed variations;
- quantity of waste that may be discharged;
- rate of discharge - maximum instantaneous, maximum daily;
- hours of day, days of week discharge is allowed;
- requirements for/details of effluent improvement program;
- details of self-regulation monitoring program including:
    - sampling/inspection 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;
- pre-treatment processes to be used;
- conditions for maintenance of, and removal of waste from, pre-treatment equipment including the frequency of cleaning, waste transporters to be used;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment and disposal of waste;

- the obligation of the Trade Waste Contract holder concerning any variations to operation or treatment processes that may affect discharge quantity or quality including change of business type;
- a force majeure clause;
- a statement that Trade Waste fees & charges apply in accordance with Section 6 of this Trade Waste Environmental Management Plan; and
- any other conditions relevant to the particular discharge as agreed.

Renewal forms will be sent out annually by Council. These must be sent back to Council by the due date.

Approval from Council's Trade Waste unit is to be sought before any changes or variations to the Trade Waste Contract to discharge are made.

Any breaches of compliance to the Trade Waste agreement will incur penalty fees & charges at full cost to the Property Owner. Furthermore, any breaches may result in a remedial, show cause or enforcement notice, or any other action under the legislation.

All waste from a business considered as medium to high risk must discharge to a separate access chamber or manhole before discharging to the sewer and an appropriate flow meter installed. Independent testing must be carried out at regular intervals as stated in the Contract by Council and Property Owner.

Where a waste is deemed to be non-sewerable, an approval will not be issued and alternative arrangements for disposal of wastes will have to be made. General advice on treatment and disposal options for non-sewerable waste may be obtained from the Council's Trade Waste Unit; however detailed advice should be sought from appropriately qualified private consultants.

5.4 Suspension or Cancellation of a trade waste approval/contract

Grounds and procedures for suspension or cancellation of a Trade Waste Approval or Contract are specified in section 182 (Suspending or cancelling Trade Waste Approval) of the *Water Supply (Safety & Reliability) Act 2008*.

For any matter occurring before the suspension or cancellation of a Trade Waste Approval, terms and conditions of the approval, including charges, shall continue to have force and effect after the suspension or cancellation of the Trade Waste Approval.

5.5 Approval holder's responsibilities

The approval holder is responsible for ensuring that:

- an application is made for Trade Waste Approval
- trade waste is not discharged without a Trade Waste Approval
- the discharge complies with the conditions of the Trade Waste Approval
- the works required under any remedial notices issued by council are completed
- council is reimbursed the costs for undertaking any works required under a remedial notice, if required
- trade waste charges are paid
- all parties involved in trade waste activities are aware of their obligations under the relevant Trade Waste Approval and this TWMP.

5.6 Occupiers (trade waste generator) responsibilities

Any discharge to sewer that is not in accordance with a Trade Waste Approval (i.e. illegal discharge) is the responsibility of the person undertaking that discharge, usually the occupier of the property, however, ultimately the responsibility lies with the property owner

The Owner of a property with a Trade Waste Approval may pass on trade waste charges to the business that generates the waste. This is a private arrangement between Owner and business operator that does not involve council. Council will continue to pursue the Owner of the property for any outstanding fees despite the existence of any private arrangements.

Occupiers are responsible for ensuring safe and timely access to Council's Trade Waste Officers for the purposes of undertaking trade waste inspections.

Approval holders must make all parties involved in trade waste activities aware of

their obligations under the relevant trade waste approval and this TWEMP prior to the

discharge of trade waste by an occupier.

6. TRADE WASTE FEES AND CHARGES

6.1 Levying of charges

Trade Waste Charges and Trade Waste Fees are levied under Chapter 4 (Finances and Accountability) Section 92 (Types of rates and charges) and Section 94 (Power to levy rates and charges) of the *Local Government Act 2009.*

Trade Waste Charges and Trade Waste Fees to be levied for the ensuing financial year shall be determined by Council resolution passed before or at the same time as the budget in any financial year.

Both the basis for calculating Trade Waste Charges, and the existing Trade Waste Fees for the current financial year are available from Council on request.

Accounts for Trade Waste Charges will be issued biannually. Accounts for the Trade Waste Charges shall be a debt due by the Owner of the Premises the subject of a Trade Waste Approval. The amount owing, shall be recoverable in the same manner as general rates and shall until paid be a charge on the Premises the subject of a Trade Waste Approval, and in addition may be recovered as a debt from any subsequent Owner of the Premises.

Council may issue accounts for Trade Waste Charges at any point during a financial year if requested by the Owner of Premises the subject of a Trade Waste Approval. The request may be made for special circumstances such as the closure of a business, sale of the Premises or change of management.

Trade waste fees and charges, for the current financial year, can be found on the Councils website www.whitsundayrc.qld.gov.au and are available upon request through Council's Trade Waste Unit.

6.2 Trade waste charges

Trade Waste is divided into 3 categories for charging purposes, Category 1, 2 & 3

Trade Waste charges are levied as follows:

Category 1 Trade Waste

Trade waste charge for the discharge of Category 1 Trade Waste to the sewerage system shall be the sum of:

(a) the Base Charge for Category 1 Trade Waste;

Category 2 Trade Waste

Trade Waste charge for the discharge of Category 2 Trade Waste to the Sewerage System shall be the sum of:

(a) the Base Charge for Category 2 Trade Waste: and
(b) the conveyance and treatment charge for Category 2 Trade Waste which is calculated as follows:

C = V*k where

C is the conveyance and treatment charge for the period of discharge; and

V is the volume (as determined pursuant to **section 9.1.2**) of Category 2 Trade Waste discharged during the period of discharge (kL); and

k is the unit charge rate ($perkL) determined by Council in its annual budget as applicable to the period of discharge.

The unit charge rate, **k**, is based on the average cost of collection, treatment and disposal of the total wastewater flow to Council's sewage treatment plants, as determined by Council at its absolute discretion.

Category 3 Trade Waste

Trade Waste charge for the discharge of Category 3 Trade Waste to the Sewerage System shall be the sum of:

(a) the Base Charge for Category 3 Trade Waste; and
(b) the conveyance and treatment charge for Category 3 Trade Waste which is calculated as follows:

C = V*a + V*n1*x1/1000 + V*n2*x2/1000 + ….. where

C is the conveyance and treatment charge for the period of discharge; and

V is the volume (as determined pursuant to **section 9.1.3**) of Category 3 Trade Waste discharged during the period of discharge (kL); and

a is the unit charge rate determined by Council in its annual budget ($/kL) as applicable to the period of discharge; and

n1, n2 are the unit charge rates determined by the Council in its annual budget for pollutants **N1, N2** ($/kg); and

x1, x2 are the average concentrations of pollutions **N1, N2** (mg/l); and

N1, N2 are the pollutants to be charged for.

The above formula shall be used to calculate charges for TSS, COD, TOG, THc, TKN and TP.

Other pollutants are included if they exceed the Sewer Admission Limits.

6.3 Application fees

Application for approval to discharge Trade Waste shall be accompanied by the prescribed Application Fee.

6.4 Annual renewal & approval fees

A Base Charge (approval fee) and renewal fee is applied to cover administration, inspections and compliance testing for each approval.

6.5 Inspection & analysis fees

The annual renewal and approval fee in all categories allows for routine inspections and a laboratory analysis by Council. Where additional inspections and laboratory analysis are required because of non-compliance and approval conditions, full costs will be recovered from the Approval Holder.

The cost of inspection shall be based on the charge out rate for the relevant Council staff involved and include time spent on site and travel to and from the site.

The full cost of any additional laboratory analysis carried out by the Council will also be recovered from the Approval Holder.

6.6 Commercial/Industrial strata titled units

As a condition of approval by Council, each strata title premises on a strata titled property which has a Trade Waste Generator, shall have a Trade Waste meter fitted to the water supply to the trade waste service area for the purpose of calculating the Trade Waste charges.

6.7 Additional charges for excess strength discharges

This charge applies:

- Where Council decides to accept Trade Waste with contaminant concentrations exceeding the Sewer Admission Limits (Schedule 1, Appendix 2);
- Where a Trade Waste Generator continually discharges waste to sewer in excess of the limits defined in the Trade Waste Approval or the Sewer Admission Limits (Schedule1, Appendix2) without approval to exceed the limits.

This charge shall apply to each non-complying parameter in addition to the general charges under this section.

The formula for calculation is:

Charge ($) = (actual/approved)d × charge rate ($/kg) × 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.

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

6.8 Septic tank & regulated waste fees

Licenced waste transporters and other persons disposing of septic tank, portable toilet or other approved liquid (regulated) waste to the sewer or sewage treatment plant will be charged on a calculated volume basis ($/kL), which takes into account the volume and strength of the waste.

Sludge and silt from a septic tank will not be permitted for disposal into the sewage treatment plant. Regulated waste disposal contractors wishing to discharge septic tank, portable toilet waste or other approved holding tank or liquid waste to Council's sewage treatment plant must be licenced. These businesses will be required to maintain and produce discharge records to Council.

6.9 Equivalent Arrester Charges

This charge applies at Council's sole discretion where an existing waste stream requires the installation of an arrestor to provide best practice pre-treatment for

discharged wastes, but site-specific conditions do not allow for appropriate devices to be installed. Council may require the Property Owner to show cause why an appropriate device cannot be installed.

Typically, financial reasons are not an acceptable excuse for the waiver of the installation of a pre-treatment device.

In addition to the normal annual charges, a charge equal to the average cost paid by other Trade Waste Approval holders of similar waste type and quantity, to have arrestors regularly cleaned will apply. (Refer to current Trade Waste Fees/Charges).

6.10 Penalties & Recovery of Costs

Council may prosecute any person who commits a breach of the *Water Supply*

(Safety & Reliability) Act 2008, the *Local Government Act 2009* or the *Environmental*

Protection Act 1994 and the subordinate legislation, or who refuses or neglects to comply with any direction or requirement of Council pursuant to the above legislation or other relevant legislation. Penalties are set out in the above legislation and include substantial fines.

Council may recover costs of repairing damaged sewerage infrastructure if a person,

- damages the sewerage system by discharging unauthorised material,
- makes an unauthorised connection or,
- interferes with infrastructure in any other manner.

Council may also recover compensatory costs for lost revenue or any other costs that compensate Council.

7. SEWER ADMISSION LIMITS

Any waste discharging to Council's sewer must comply with the Trade Waste Sewer

Admission Limits. Sewer Admission Limits are contained in Appendix 2. The limits are the absolute maximum concentrations and are subject to periodic review.

The Trade Waste stream and domestic waste stream shall, wherever practicable, discharge separately to the sewer. Where there is a common sanitary drain, allowance for the domestic component will be made to estimate the actual Trade Waste component strength.

Council requires that Trade Waste Generators/Approval Holders implement waste minimisation practices and install best practice pre-treatment processes to reduce both the volume and the contaminant load of wastes discharged to sewer.

It is the responsibility of the Trade Waste Generator/Approval Holder to ensure the trade waste effluent meets sewer Admission Limits, however, ultimately the responsibility lies with the Approval Holder. Approval Holders may be required to have:

- a Council approved interception or pre-treatment device;
- an arrangement with a waste servicing contractor to service pre-treatment equipment on a regular basis;
- an approved maintenance program;
- an ongoing record of operation and maintenance of pre-treatment facilities.

The Approval Holder will also be required to provide devices to:

- measure Trade Waste flows;
- undertake effluent quality monitoring.

Diluting Trade Waste with water to comply with Sewer Admission Limits is prohibited.

Council has obligations to avoid sewer overflows and consequently can impose limits on the rate and timing of Trade Waste discharges.

8. EFFLUENT IMPROVEMENT PROGRAMS

Council may require a Trade Waste Generator/Approval Holder/ to undertake an Effluent Improvement Program. This program should include:

- A description of the effluent quantity and quality;
- Provision for monitoring and reporting waste quantity and quality;
- An examination of waste prevention and recycling options;
- An examination of options for the conservation of water;
- A program involving the development of waste reduction and pre-treatment aimed at reducing contaminant levels over a period of not more than three years to the prescribed Admission Limits. An action program must be provided, including expected outcomes, timelines and milestones;
- A report for Council, detailing a summary of achievements and options.

Council will advise Generators/Approval Holders in writing if an Effluent

Improvement Program is required.

9. INSPECTION AND MONITORING

Council Trade Waste officers will routinely and randomly inspect the premises of Trade Waste Generators. Generators will permit Council officer's entry to premises at all reasonable times and will not obstruct inspections.

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

- bunding facilities and drainage routes from chemical storage areas;
- stormwater collection and disposal systems;
- Trade Waste connections and generating areas;
- pre-treatment facilities, service histories and standby equipment;
- concentration and volume measurement; and
- work practices.

9.1 Inspection chambers and/or gauging facility

Unless instructed otherwise by Council, all Medium to High risk waste shall be discharged to Council's sewerage system through a suitable access chamber or manhole. This manhole must be located on the trade waste discharge line in an area accessible at all times to Council's officers, 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 manhole sites.

Trade Waste streams must be separated from the domestic stream. For existing installations retrofitting is not required except where it may be done during any proposed upgrading or alterations to the installation or as a requirement of the Permit to discharge.

If a commercial or industrial premise generates Trade Waste discharging into Council's sewerage system but does not discharge through a pre-treatment device, a suitable sampling point (disconnector trap) must be installed on the sanitary drain. It must be in an accessible location within the property boundary and before connecting into the Council sewer. This is to enable checks to be made to ensure that the trade waste discharge does not exceed the limitations stated in Table 1.

Arrestor trap installations and other pre-treatment devices on premises discharging

Trade Waste to sewer must have a disconnector trap with a capped riser provided immediately downstream of the device, within the premises, at finished ground level.

10. DETERMINATION OF DISCHARGE QUANTITY AND QUALITY

10.1 Determination of trade waste Quantity (flow)

Volumetric consumption charges are the utility charges to cover the cost of treatment, administration and overhead costs of operating and maintaining the sewerage system associated with Trade Waste that is received at Council's sewage treatment plants. Consumption is read in Kilolitres (kL)

The volumetric charge reflects the 'user pays' principle. It is simply the amount of sewage that is discharged by the business to the sewer. Every business premises with a commercial or industrial manufacturing process will pay volumetric charges. Category 1 Generators discharging <350KL of trade waste per annum would be exempt from volumetric charges.

Volumetric consumption charges are the responsibility of the Property Owner and will be billed accordingly on a bi-annual basis at the discretion of Council.

Accounts for volumetric consumption trade waste discharged to sewer will be:

- Biannually for Category 2 and as per Contract for Category 3. The annual allowance will be halved and incorporated accordingly into the biannual notice;
- inclusive of excess discharge fees if exceeding total substance strength limits (Table 5.1);
- a debt payable by the Property Owner;
- charged interest at a rate fixed by the Council if not paid within stated period.

Where accounts are not paid by the due date, Council will recover the fees as a debt on the property and recover the debt in accordance with the *Local Government Act 2009*.

Property Owners must contact Council as soon as possible if payment cannot be made by the due date or if there are any queries relating to the account.

10.1.1 Category 1 & 2

In the absence of an approved Trade Waste flow meter, Council may accept the volume of Trade Waste discharged from a standalone property be estimated by the metered potable water consumption to the property boundary multiplied by a discharge fraction. The discharge fraction represents the proportion of water consumed at the property which is discharged as Trade Waste.

Council will adopt industry standard discharge fractions for Trade Waste businesses; the factors are included in Appendix 3. An approval holder may apply for a variation of their discharge fraction if they believe the business includes non-standard water use; the application form is available on Council's website. Variations will only be considered on the basis that a sewage discharge meter, a sewage flow monitoring device or an internal sub - water meter is correctly installed at the premises. Where there is no discharge fraction available, Council will estimate a factor up to 100 percent.

10.1.2 Category 3

An approved flow measurement device calibrated as specified in the Contract will measure the volume of Trade Waste discharged to the sewer. This should be located on the Trade Waste discharge stream, which should be separate from the domestic waste discharge stream.

10.1.3 Trade waste meters

All Trade Waste generating properties, will, at the discretion of the Council, be required to install a Trade Waste sub water meter.

The meter shall be installed within or external of the premises in a location that is easily accessible by Council staff for monitoring.

A plan must be submitted by the Applicant/Owner or Generator (with Owners consent) detailing the proposed location of a Trade Waste meter. All costs involved in purchase and installation shall be the responsibility of the Property Owner.

Trade Waste meters must be maintained as per the manufacturer's recommendations, the meter must be of brand excepted by Council.

To provide Council with accurate assumptions it is crucial that metered water supply is directed to the fixtures/fittings that are deemed to be trade waste discharge only.

Council may exempt the installation of a Trade Waste meter if the Property Owner can show cause why a meter cannot be installed.

10.1.4 Meter failure

Should the water meter fail, readings from the previous four (4) billing periods will be averaged and used to calculate the sewerage charge. If the failure occurs before four billing periods have elapsed, available data will be used.

In the event of the Trade Waste meter failing, the Trade Waste and water meter readings from the previous four (4) billing periods will be used to estimate a discharge fraction. This discharge fraction will be used in conjunction with the water meter readings from the current billing period to calculate the sewerage charge. If the failure occurs before four billing periods have elapsed, available data will be used.

10.2 Determination of discharge Quality

10.2.1 Low to medium risk dischargers

Quality measurements for low to medium risk discharges are required for compliance checks only. Council will do this as part of its inspection and monitoring regime. Where additional inspection and testing is required because of non-compliance, the Property Owner will be charged for these services.

10.2.2 Medium to high risk dischargers

Quality measurements are required for both charging and compliance purposes.

For charging purposes, a system of self-monitoring by the Approval Holder and/or the generator will be used to collect sufficient data to enable the 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 shall be specified in the Contract.

The Property Owner shall meet all costs of self-monitoring.

The Property Owner shall be responsible for quality fees and charges.

Council may inspect the premises, randomly collect and analyse samples for assessment of compliance with Contract conditions.

Where self-monitoring is not done, or additional inspection and testing is required to

be done by Council as a result of non-compliance, Council will charge the Property Owner as prescribed in Council's Register of Regulatory fees applicable at time of discharge.

11. CALCULATING ACTUAL DISCHARGE CHARGES

Where information is available, charges will be based on the actual quality and quantity of discharge for the period where a Trade Waste meter is installed and not on discharge factors or figures described in the Trade Waste Approval.

Charges will be determined as follows:

Component of volumetric charge		
Category	Quantity Charge	Quality Charge
1	None (<350kL per annum*)	None** (assumed domestic strength)
2	$V.\$_v$ (All volume) >350kL<5000kL	None** (assumed domestic strength)
3	$V.\$_v$ (All volume) >5000kL	$\sum(V.C_{TSS}/1000).\$_{TSS}$ $+(V.C_{COD}/1000).\$_{COD}$ $+(V.C_{PH}/1000).\$_{pH}$ $+(V.C_{TOG}/1000).\$_{TOG}$ $+(V.C_{TKN}/1000).\$_{TKN}$ $+(V.C_{THC}/1000).\$_{THC}$

*****Where maximum permitted volume is exceeded, customer will become a category 2 business.
**Over strength charges still apply

Where:

V	is the net trade waste volume for the billing period (kL)
$\$_v$	is the unit charge rate for the volume and treatment costs for that category ($/kL)
C_{TSS}	is the average concentration of total suspended solids for the billing period (mg/L)
C_{COD}	is the average concentration of chemical oxygen demand for the billing period (mg/L)
C_{pH}	is the average concentration of total phosphorus for the billing period (mg/L)
C_{TOG}	is the average concentration of total oil & grease for the billing period (mg/L)
C_{TKN}	is the average concentration of total nitrogen for the billing period (mg/L)
C_{THC}	is the average concentration of total hydrocarbon for the billing period (mg/L)
$\$_{TSS}$	is the unit charge rate for total suspended solids ($/kg)
$\$_{COD}$	is the unit charge rate for chemical oxygen demand ($/kg)
$\$_{pH}$	is the unit charge rate for total phosphorus ($/kg)
$\$_{TOG}$	is the unit charge rate for total oil & grease ($/kg)
$\$_{TKN}$	is the unit charge rate for total nitrogen ($/kg)
$\$_{THC}$	is the unit charge rate total hydrocarbon ($/kg)

Notes:

1. The unit charge rate ($) reflects sewerage system operating costs. It also incorporates both volume and mass load costs based on domestic sewage.
2. Category 1 and 2 Property Owners will be required to pay additional costs if trade waste discharge to sewer exceeds the limits set in Appendix 2
3. Charges for water quality testing can be found under the 'Fees and Charges' section on the Council's website.

4. Annual Trade Waste permit fees are in addition to the quality & quantity charge. Councils Trade Waste pricing schedule is available on Council's website.

12. SPECIFIC REQUIREMENTS FOR COMMERCIAL AND INDUSTRIAL WASTES

12.1 Removing regulated wastes from premises

Regulated wastes are non-domestic wastes listed in Schedule 7 of the *Environmental Protection Regulation 2008*. Examples include:

- acids and acid solutions;
- chlorides;
- laboratory chemicals;
- fish processing waste;
- oil separator sludges;
- oil and water emulsions;
- treatment tank sludges;
- grease interceptor trap residue.

Many regulated wastes cannot be disposed to sewer. Advice on appropriate disposal methods for regulated wastes may be obtained from the Trade Waste section of Council.

Discretionary agreements between the Council and the Trade Waste Generator will be developed, for these regulated wastes, upon application.

Regulated waste and waste from septic tanks, portable toilets and holding tanks can only be removed by DEHP licenced regulated waste transporters and must be disposed of in accordance with requirements in the *Environmental Protection Act 1994* and its subordinate legislation.

Licenced waste transporters must maintain records to account for all waste collected and disposed of within or outside Council's jurisdiction. These records may be required to be submitted to the Council's Trade Waste Officer and may be used by Council to audit the pre-treatment servicing arrangements of its trade waste customers.

Licenced waste transporters must be registered with Council to discharge liquid waste to Council's sewage treatment plants. Waste must be compliant with limits in this document.

No person shall discharge or cause to be discharged directly or indirectly to sewerage, wastes from any waste transport vehicle without a Trade Waste Approval.

Waste from grease and oil arrestors, other than treated effluent from approved installations will not be discharged to the sewerage system. Such waste will be disposed of in a manner and/or at a site approved by Council and in accordance with requirements of the *Environmental Protection Act 1994*, the *Environmental Protection Regulation 2008*, the *Environmental Protection (Waste Management) Regulation 2000* and the *Waste Reduction and Recycling Act 2011*.

Trade Waste charges in accordance with Section 6 and Council's Register of Regulatory Fees & Charges will apply to all transported liquid and sludge waste approved for discharge to sewerage.

Advice on the disposal of liquid waste not suitable for discharge to sewerage may be obtained from the Waste section of Council.

12.2 Arrester Installations

Where arrestor installations are required to pre-treat waste before discharge to sewer they must be of a design and capacity approved by Council.

In an existing situation where a grease arrestor is required for pre-treatment but cannot be installed due to specific site constraints, an equivalent arrestor charge will apply. This is subject to approval and is not encouraged by Council.

Arrangements must be made with licenced regulated waste transporters to have Arrestor installations cleaned on a regular schedule as determined by the conditions of the Trade Waste Approval or as directed by Council's Trade Waste Services. Council has the right to alter the frequency at any time and any additional cleansing costs will be at the Property Owners cost.

12.2.1 Grease Arrestors

Guidance on the sizing and installation of grease arrestors is available from the

Queensland Plumbing & Wastewater Code 2019, this TWEMP and from Council's Trade Waste Officer.

Adequately-sized grease arrestors are required at every commercial premises where the washing of crockery, cutlery and utensils associated with food preparation or servery is conducted. The installation of pre-treatment equipment will ensure the sewage discharge remains in a low risk category.

The minimum capacity of an individual grease arrestor shall be 1,000 litres (unless approved otherwise by Council), the maximum individual grease arrestor capacity is 5,000 litres. Where the capacity requirement for a premise is greater than 5,000 litres, additional arrestors shall be used, with each arrestor to be a discrete installation separately treating a defined waste stream.

All newly installed grease arrestors shall be fitted with approved openings complete with gas tight covers and frames. All new concrete grease or silt arrestors installed are to be protected by an internal acid resistant protective coating.

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 arrestor;
- details of the loading to be discharged by each trade waste generator;
- the names of the businesses and shop number(s) sharing the arrestor.

The Property Owner shall be responsible for the on-going operation and maintenance of the facility.

Where the activity of individual tenancy/shop on a new multi-tenancy complex is unknown, Council recommends that trap sizing estimates are based where possible on a 'worst case' scenario. The trap shall be located as close as practical to the furthest connection point(s), where long pipe runs are unavoidable the pipe grade shall be increased to 1:40 minimum.

Grease arrestors must be located so as to allow appropriate access for inspection and servicing requirements. Council must approve the location prior to installation. A hose tap with an RPZ backflow prevention device provided for cleaning within 5 metres of the grease arrestor. Where a grease arrestor is unable to be located in an accessible area for servicing, a suitable pump out line must be installed.

The hydraulic design for venting of Grease Interceptor trap installations is as follows:

1. A 100mm induct vent to atmosphere is required on the interceptor trap itself. The vent must extend to the open air independently. The termination of the induct vent is to comply with AS3500.2.

2. A 100mm educt vent to atmosphere is required upstream of the interceptor trap. The 100mm vent is to be located between the last and second last fixture on either the main drain or branch line, whichever has the appliance with the highest volume/temperature output connected to it. This will ensure cooling of the hot discharge to be effective immediately.

3. The sizing design for all Trade Waste branch drain vents is to be in accordance with AS3500.2.

Air Admittance Valves (AAV) must not be installed upstream of any interceptor trap if the following is applicable:

- When appliance discharge temperature exceeds 60 degrees Celsius (AS3500.2)

AAV's only enable air to enter the system, not the expelling of air which aids in cooling interceptor traps and aids in removing obnoxious odours from the Trade Waste system

It is recommended considering the use of 100mm vents on all branch lines that contain high volume/ high temperature discharge appliances to ensure maximum cooling effect of the system, but it is not compulsory.

Grease arrestors that need to be installed internal of the building must be located in a suitably sealed, vermin proofed room with mechanical ventilation. The room must have external access only and be completely sealed from food preparation areas. A hose cock and remote servicing pipe must be located within the room. The door of the room must remain closed when the grease arrestor is being serviced.

Remote servicing pipes for pre-treatment equipment must be minimum 80mm diameter. The pipe inlet at the device end must be positioned above the device and be complete with a cam lock fitting. The suction end of the pipe shall be easily accessible and fitted with a male cam lock fitting.

Grease arrestors installed in restricted areas must satisfy the following requirements:

- The minimum clear height above the top of the arrestor lids and the underside of the floor slab, or concrete thickening beam or any other obstruction should be 1500mm minimum for gastight screw on light duty lids and 1800mm minimum for gastight covers and frame.
- A safe working platform may be required adjacent to the arrestor to enable the gastight covers to be removed from the frame. The walkway floor of the platform should be a minimum of 2100mm clear of the underside of the floor slab, or concrete thickening beam or any other obstruction.

Grease arresters located in basements or confined spaces under a building must have servicing pipe installed for the remote pumpout of the pre-treatment device. The service pipe must be sized in accordance with the waste contractor's recommendations. The pipe inlet shall be connected directly to the trap which is purpose built for the application. The suction end of the pipe should be easily accessible and fitted with a male Camlok fitting.

Maintenance cleaning of grease arrestors must be carried out on a regular basis in accordance with conditions of the Trade Waste Approval by a waste transporter licenced under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 2008*.

If the cleaning of the grease arrestor is not undertaken as per Permit Conditions, Council will arrange for this to be done and all related charges (including 15% for overheads) will be at full cost to the property owner.

Guidelines for grease arrestor sizing can be found in Appendix 5.

12.2.2 Oil Arrestors

Appropriately sized mineral (petroleum) oil arrestors for the treatment of oily wastewater will be approved in most circumstances.

Acceptable methods include:

- coalescing plate separators;
- membrane technology;
- dissolved air flotation (DAF);
- chemical precipitation;
- hydrocyclones; and
- other apparatus /methods.

Each application will be assessed on the nature of the oily waste to be treated, the proposed treatment method and site location. The unit must be located so as to allow appropriate access for inspections and servicing. Council must approve the location.

A collection well and non-emulsifying pump must be provided to collect:

- water used for washing of mechanical equipment or parts
- floor wash-down.

A coalescing plate interceptor (CPI/CPS) with a minimum capacity of a 1000litres per hour or a vertical gravity separator (VGS) or hydrocyclone separation system (HSS) sized according to the influent flow rate must also be installed to treat the wastewater.

In instances where the flow rate will exceed 1000litres per hour, a larger capacity unit will be required and must be sized according to the influent flow rate. The applicant must provide supporting information regarding sizing and recommended maintenance schedule with the application.

The units should be installed as per the manufacturer's instructions, and where applicable the distributor or supplier must be able to guarantee supply of parts and service maintenance.

A dry basket arrestor or screen must be fitted to all floor wastes/drainage pits that drain to the holding tank, to strain out gross solids. The holding tank shall have a minimum capacity of 2,000 litres

An oil arrestor is more efficient if detergents are not used, e.g. cleaning done using high water pressure. If the use of detergents cannot be avoided, only quick-break detergents should be used. Degreasers must not be discharged into the sewerage system. Further, only non-emulsifying pumps should be used to pump the liquid waste to the separator.

Note that double and triple interceptor pits and general-purpose silt pits are not considered to be, nor are they approved as, appropriate pre-treatment equipment units for this type of wastewater.

A hose tap with an RPZ backflow prevention device installed is to be provided for cleaning purposes.

Above ground oil separators must be positioned within a roofed & bunded area, Bunding will hold the capacity of the pre-treatment device plus 10% or drained back to holding tank or as advised by the Trade Waste Officer

Subject to recommendations by the manufacturers of plate separators, "Quick Break

Detergents" may be used with plate separation units.

Following installation, each pre-treatment facility shall be commissioned by a person or company accredited for this purpose by the manufacturer or supplier of the equipment. As part of the commissioning, the following documents shall be provided:

(a) a certificate of commissioning to be to be forwarded to Council's Trade Waste officer and
(b) a schedule of recommended cleaning and maintenance to be given to the owner and kept at the premises for reference and available for inspection by us on request. The schedule shall provide:
    - a description of activities to be undertaken (e.g. for coalescing plate separators the removal and cleaning of plates, sludge withdrawal from hopper, etc.)

- minimum frequencies for these activities; and
- any special observations to be made which would affect the frequency of this maintenance schedule or which may indicate conditions when qualified service personnel may need to be engaged.

Maintenance cleaning of mineral oil arrestors shall be carried out on a regular basis in accordance with conditions of the Trade Waste Approval. A regulated waste transporter licenced under the *Environmental Protection Act 1994* and the

Environmental Protection Regulation 2008 must be employed to undertake the removal of oily waste.

12.2.3 Other Pre-treatment system Applications

Pre-treatment system installations may be used for other trade waste applications such as:

- silt separation;
- cooling;
- neutralisation; and
- other specific applications approved by Council.

Each application will be assessed on the nature of the waste to be treated, the proposed treatment method and site location. The unit must be located so as to allow appropriate access for inspection, pump out and cleaning. Council must approve the location prior to installation. A hose cock with suitable backflow prevention is to be provided for cleaning.

Maintenance cleaning of the pre-treatment system shall be carried out on a regular basis in accordance with conditions of the Trade Waste Approval by waste transporters licenced under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 2008*.

If the maintenance of the pre-treatment system is not undertaken on a regular basis, Council will arrange for this to be done and all related charges (including 15% for overheads) will be at full cost to the property owner.

12.3 Enzymes/Biological substances

12.3.1 Enzyme and Bacterial Cultures

The use of solvents, enzymes, mutant or natural bacterial cultures, odour control agents or pesticides in grease arrestors is prohibited. Conditional approval may be given to allow the Trade Waste Generator to demonstrate to Council that the product to be used does not adversely impact on the sewerage system or the environment.

12.3.2 Genetically Modified Organisms (GMO's)

The use of genetically modified organisms (GMO's) is regulated under the Gene

Technology Act 2000 (Commonwealth Legislation) and the Gene Technology Act 2001(Queensland Legislation).

Any person wishing to discharge commercial products containing genetically modified organisms to sewerage must first obtain approval from the Gene Technology Regulator Canberra. Council may then grant approval for discharge to sewerage.

Laboratories and other facilities which culture, package or transport GMO's should have in place sufficient procedures and pre-treatment equipment to ensure that no live GMO's are discharged to sewerage.

12.4 Food Waste Disposal Units

Food waste disposal units (garbage grinders/in sink waste disposal units) are not permitted to be installed.

The installation of food waste disposal units in a commercial situation place an unnecessary biological and solids load on Councils sewerage infrastructure.

12.5 Commercial Swimming Pools/Ornamental Pools

A trade waste Permit or Agreement is required to discharge back wash water and water from commercial and public swimming pools or ornamental ponds to sewer. Pool backwash discharge rate may need to be limited subject to assessment. Pool overflow shall not discharge to sewer.

12.6 Medical, Clinical, veterinary & infectious waste

Clinical and related waste should be managed in accordance with the requirements of the *Waste Reduction and Recycling Act 2011, Radiation Safety Act 1999*

Radiation Safety Regulation 2010 and the *Environmental Protection Regulation 2008*.

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.

Discharging liquid wastes including faeces and body fluids to sewer from any hospital, clinic, office or surgery of a medical or veterinary facility or laboratory, convalescent or nursing home or health transport facility is permitted in accordance with the *Environmental Protection Regulation 2008*.

Infectious or hazardous liquid wastes deemed to pose a threat to public health and safety may not be discharged to the sewer without approval from Council. 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.

12.7 Containment of Toxic/Hazardous Substances

Any potentially toxic or hazardous substances shall be stored in bunded areas where leaks, spillage, or overflows cannot be drained by gravity or by any automated mechanical means to sewerage or the storm water drainage system.

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

12.8 Discharge of Liquid Wastes from Vessels, Vehicles & Aircraft

12.8.1 Vessels

Depending on the quality, the discharge of certain galley and toilet wastes from 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 to sewerage. Charges in accordance with section 6.2 will apply. The discharge of untreated bilge water to the sewer is prohibited.

12.8.2 Buses, Aircraft, Recreation Vehicles

The discharge of toilet waste from buses, aircraft or 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 for discharge to sewerage and discharge must be in accordance with the approval conditions. Charges in accordance with section 6 will apply.

12.9 Landfill Leachate & Disposal Facility Wastewater

Leachate from landfill sites and wastewater from waste treatment/disposal facilities constitutes a trade waste and may not be discharged to sewer without approval through the issue of a Trade Waste Approval. Charges in accordance with the discharge category classification will apply.

12.10 Discharge from Open Areas

The discharge of rainwater and storm water to sewer is prohibited.

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

The discharge to sewer from any potentially contaminated open area that is raised or bunded may be considered, provided the quality and quantity requirements of this plan are met.

Applicants should note that an open area approval is not an alternative to the appropriate management of polluted areas such as roofing or other methods to keep water away from the open area. Applicants must demonstrate to Council that all appropriate measures to keep runoff water away from the potentially contaminated open area have been taken.

A Trade Waste Approval is required to discharge such waste.

All applications for sewer discharge from open areas must have controls incorporated in the design that will, in the opinion of Council ensure that:

- all contaminated liquid waste is pumped to sewer at a rate acceptable to Council;
- all discharge to sewer ceases automatically after a predetermined level of rainfall volume (mm) and/or intensity (mm/hr) to be set by Council;
- the "first flush" volume is collected and segregated during wet weather with additional runoff directed to the storm water system. Applicants should seek advice from Council on the required “first flush” volume to be collected;
- the "first flush" volume collected is pumped to sewer, after any necessary pre-treatment, no sooner than one (1) hour after the rain stops;
- a suitable device for the determination of sewer discharge flow and volume to be installed.
- any additional conditions as applicable

All conditions will be specified in the Permit/Contract.

Charges in accordance with the discharge category classification will apply.

12.11 Stormwater

The discharge of surface water, stormwater runoff and roof water into Councils sewerage system is prohibited.

Areas of the building and site that may be subject to stormwater entry into the sewerage system must be roofed and/or bunded.

The roof must have sufficient overhang from the designated area to prevent ingress of rainwater. The overhang shall be at least 25% outwards from the vertical above either a bund or ground contour grading apex.

Inflow and infiltration of stormwater into Council’s sewerage system causes significant operational problems and cost to the community. Due to environmental harm, property damage and public health risks from sewerage surcharge after wet weather events, unroofed trade waste generating areas will not be accepted.

Where roofing of the trade waste generating area will cause non-compliance with a law, regulation or building condition Council may consent the installation of an approved sewer/stormwater diversion valve system.

12.12 Discretionary Power

Notwithstanding the provisions of this management plan, due to the complexity of many industrial wastes and the need to protect Council's sewerage system, employees, and the environment, acceptance of any given Trade Waste to sewer will always be at the discretion of Council.

12.13 Force Majeure (Medium to High Risk)

In addition to section 12.12 (Discretionary Power), if at any time the ability of Council to accept trade waste to the Sewerage System is interfered with or prevented directly or indirectly due to force majeure, the Council may suspend the Contract to discharge trade waste under the Contract either wholly or partly for the period of such inability without any liability to the Permit holder or trade waste generator whatsoever for any losses or damage suffered or incurred by the Permit holder or Trade Waste Generator whatsoever.

12.14 Records & Reporting

Council will develop a waste database for the purpose of maintaining, in a publicly accessible form, information on waste generation within Council's local government area.

A component of the database will contain Trade Waste information based on information produced by holders of Trade Waste Approvals, and from monitoring conducted by or under Council direction.

Council will report annually on the implementation of its Trade Waste Environmental Management Plan to the Environmental Protection Agency / the Department of

Natural Resources, Mines and Energy through the Total Management Planning process.

12.15 Information Privacy

All information developed and retained on waste generation within Council's local government area will be managed in accordance with *Local Government Act 2009,* The *Right to Information Act 2009 (the RTI Act)* and the *Information Privacy Act 2009 (the IP Act)*.

This ensures that all information is correctly managed to provide for:

- The fair collection and handling in the public-sector environment of personal information; and
- A right of access to, and amendment of, personal information in the government's possession or under the government's control unless, on balance, it is contrary to the public interest to give the access or allow the information to be amended.

APPENDIX 1

SELECTED LEGISLATION RELEVANT TO TRADE WASTE:

Body Corporate and Community Management Act 1997

Building Units and Group Titles Act 1980

Environmental Protection Act 1994

Environmental Protection (Water) Policy 2009

Environmental Protection Regulation 2008

Gene Technology (Queensland) Act 2016

Gene Technology Act 2000 (Commonwealth legislation)

Local Government Act 2009

Plumbing and Drainage Act 2018

Plumbing and Drainage Regulation 2019

Queensland Plumbing & Wastewater Code 2019

Radiation Safety Act 1999

Radiation Safety Regulation 2010

State Penalties Enforcement Act 1999

State Penalties Enforcement Regulations 2000

Sustainable Planning Act 2009

Water Supply (Safety & Reliability) Act 2008

Whitsunday Regional Council Local Laws

APPENDIX 2

SEWER ADMISSION LIMITS

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

If, in the opinion of the Trade Waste Officer, it is determined that the wastewater may have an adverse effect on the sewerage system, these limits may be reviewed and replaced with more stringent limits for a specific discharge.

Schedule I - GENERAL LIMITS

PARAMETER	MAXIMUM LIMITS	REMARKS
Temperature	<38^{0}C	Higher sewage temperatures: ➢ cause increased damage to sewer structures ➢ increase the potential for anaerobic conditions to form in the waste water ➢ promote the release of gases such as H2S and NH3 ➢ can adversely affect the safety of operations and maintenance personnel.
pH	6 - 10	Extremes of pH: ➢ can adversely affect biological treatment processes ➢ can adversely affect the safety of operations and maintenance personnel ➢ cause corrosion of sewer structures ➢ increase the potential for the release of toxic gases such as H2S and HCN.
Biochemical Oxygen Demand	500mg/L	When required, a specific BOD_5 mass load limit in kilograms per day will be applied as a trade waste approval condition
Chemical Oxygen Demand (COD)	2000mg/L	The COD value indicates the mass of oxygen consumed per litre of solution and expressed in milligrams per litre (mg/L). The higher the chemical oxygen demand, the higher the amount of pollution in the water sample. High COD levels may accelerate the generation of sulphides in sewer mains, both gravity and pressure, and consequent odours and corrosions problems.
Total Organic Carbon	900mg/L	When required, a specific mass load limit in kilograms per day will be applied as a trade waste approval condition.
Total Suspended Solids	600mg/L	High TSS could- ➢ cause blockages and sewage overflows in the drains of commercial and industrial properties. ➢ form deposits in the sewer reducing its capacity and can lead to overflow conditions. ➢ accumulate in wet wells and pumping stations resulting in increased maintenance. ➢ deteriorate mechanical equipment (pumps and valves) by abrasion. ➢ overload treatment units at the sewage treatment plant.
Total Dissolved Solids	4000mg/L	High TDS reduces effluent options and may contribute to soil salinity.

Total Oil & Grease	100mg/L	High TOG could- ➢ cause overflows in the drains of commercial and industrial properties. ➢ cause the formation of deposits of greasy solids in the sewage transport system thereby reducing its capacity. These deposits can lead to the breakaway of accumulated grease at times of high or very low flow. ➢ accumulate in wet wells of pumping stations and cause blockages and failure of the pumps and exacerbate cleaning problems. ➢ deposit in bends of the sewer and cause restrictions and blockages. ➢ reduce the efficiency of sewage treatment processes. ➢ may cause non-compliance of the STW effluent with licence conditions Form an oily film in receiving waters.
Total Hydrocarbons (for industry)	30mg/L	High hydrocarbon levels could- ➢ cause significant damage to the membranes in the receiving sewerage treatment plant. ➢ create an explosive situation within the sewerage network system.
Solids (gross)	13mm (max linear dimensions)	Gross solids can cause sewer blockages. Non-faecal gross solids shall have a maximum linear dimension of less than 13mm and quiescent settling velocity of less then 3 m/hr.
Colour	Colour not noticeable after 1000 times dilution	Colour may cause: ➢ aesthetic impairment of receiving water ➢ adverse effects on disinfection processes. ➢ Where potential for such problems exists, a level of colour which is rendered unnoticeable after the predicted dilution is desirable. Biodegradability of the colour may be an important factor where secondary treatment is used.
Chlorine (asCl_2)	10mg/L	Chlorine: ➢ can adversely affect the safety of operations and maintenance personnel ➢ can cause corrosion of sewer structures ➢ can inhibit treatment processes.
Sulphate (as SO_4)	1000mg/L	Sulphate: ➢ may increase the potential for the generation of sulphides in the waste water ➢ may adversely affect sewer structures.
Sulphite (as SO_2)	50mg/L	Sulphite is a strong reducing agent and removes dissolved oxygen thereby increasing the potential for anaerobic conditions to form in the wastewater. In particular, values will need to be set on a case by case basis if the discharge is to a sewer receiving dosed oxygen by injection for odour and corrosion mitigation. Higher values may be allowed subject to local pH and temperature conditions. Sulphite also has the potential to release SO_2 gas and thus adversely affect the safety of operations and maintenance personnel.

Aluminium (as Al)	100mg/L	
Iron (as Fe)	100mg/L	
Ammonia plus ammonia ion (measured as N)	100mg/L	High ammonia: ➢ may adversely affect the safety of operations and maintenance personnel ➢ may significantly contribute to the nutrient load discharged into the receiving environment. Higher values may be allowed subject to local pH and temperature conditions.
Total Kjeldahl Nitrogen (asN)	150mg/L	May significantly contribute to the nutrient load discharged to the receiving environment.
Phosphorus (Total P)	50mg/L	May significantly contribute to the nutrient load discharged to the receiving environment.
Manganese (as Mn)	100mg/L	

Schedule II - SPECIFIC LIMITS – INORGANIC

PARAMETER	MAXIMUM LIMITS	REMARKS
Baron (B)	100mg/L	Boron is not removed by conventional treatment. High concentrations in effluent may restrict irrigation applications.
Bromine (Br2)	10mg/L	High concentrations may adversely affect the safety of operations and maintenance personnel.
Fluoride (F)	30mg/L	Fluoride is not removed by conventional sewage treatment, however, pre-treatment can easily and economically reduce concentrations to below 20 mg/L.
Cyanide (CN)	5mg/L	Cyanide may produce toxic atmospheres in the sewer and adversely affect the safety of operations and maintenance personnel.
Sulphide (S)	5mg/L	Sulphides in wastewater may: . cause corrosion of sewer structures . generate odours in sewers which could cause public nuisance . result in sewer gases which could adversely affect the safety of operations and maintenance personnel

Schedule III - SPECIFIC LIMITS – METALS

PARAMETER	MAXIMUM LIMIT	LOWER DAILY MASS LOAD*
Arsenic (As)	5mg/L	15mg/L
Barium (Ba)	20mg/L	60mg/L
Cadmium (Cd)	2mg/L	6mg/L
Chromium (Cr) - Total - Hexavalent	 20mg/L 10mg/L	 60mg/L# 60mg/L#
Cobalt (Co)	10mg/L	30mg/L
Copper (Cu)	10mg/L	30mg/L
Lead (Pb)	10mg/L	30mg/L
Mercury (Hg)	0.005mg/L	0.015mg/L
Nickel (Ni)	10mg/L	30mg/L
Selenium (Se)	5mg/L	15mg/L
Silver (Ag)	5mg/L	15mg/L
Tin (Sn)	10mg/L	30mg/L
Zinc (Zn)	10mg/L	30mg/L

*either the concentration or mass load method may be utilized, however, once the mass load is exceeded, only the concentration method is to be used. Mass load is based on discharge volume of 3kL/day.

when considering daily mass load discharges, hexavalent Cr must be reduced to trivalent Cr

Schedule IV - SPECIFIC LIMITS – ORGANIC

Council may request specific demonstrable evidence based on degradability and toxicity concerning substances listed below.

PERAMETER	MAXIMUM CONCENTRATIONS
Formaldehyde (HCHO)	50mg/L
Phenolic compounds (as Phenol)	100mg/L
Pentachlorophenol	5mg/L
Petroleum hydrocarbon (non-flammable)	30mg/L
Halogenated Aromatic Hydrocarbons (HAH) - Polychlorinated biphenyls (PCB) - Polybrominated biphenyls (PBB)	 0.002mg/L 0.002mg/L
Polynuclear Aromatic Hydrocarbons (PAH)	5mg/L

Pesticides	
*General (insecticides/herbicides/fungicides)	1.0mg/L
*Organophosphates	0.05mg/L
• Azinphos-methyl	
• Azinphos-ethyl	
• Coumaphos	
• Demeton	
• Dichlorvos	
• Dimethoate	
• Disulfoton	
• Fenitrothion	
• Fenthion	
• Malathion	
• Methamidophos	
• Mevinphos	
• Omethoate	
• Oxydemeton-methyl	
• Parathion	
• Triazophos	
• Trichlorfon	
* Organochlorines	
• Aldrin	0.001mg/L
• Chlordane	0.006mg/L
• DDT	0.003mg/L
• Dieldrin	0.001mg/L
• Heptachlor	0.003mg/L
• Lindane	0.05mg/L

Schedule IV - OTHER SUBSTANCES

Any substance not listed in the above tables is a prohibited discharge and may not be discharged without the prior approval of Council.

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 Council Trade Waste staff may request specific demonstrable evidence based on degradability and toxicity for any substance when assessing acceptance to sewer.

APPENDIX 3

TRADE WASTE DISCHARGE FRACTION

The “Discharge Fraction” is the proportion of water supplied to a property (measured by the primary/main water meter) that is discharged to the sewerage system.

Discharge fractions may range from 0 to 100% and in exceptional circumstances greater than 100% if additional material is added to the waste stream as part of the production process.

Seasonal variations can occur throughout the year. The discharge fraction method considers these factors and aims to deliver fair estimates across the year. Discharge fractions will only be adjusted by a minimum of 5% or by multiples of 5% i.e. the discharge factor will be rounded off to the nearest 5%.

Review of Discharge Fractions

Either Council or the property owner may initiate a review of the discharge fraction if it is believed the percentage of water discharged to sewer is not being accurately calculated. The property owner can initiate a review by completing the Discharge Factor Variation Application Form. Information supporting the application should be attached but Council may also request additional information.

This information must be supplied at the applicant’s cost.

Information could include:

- flow data,
- a process schematic or building plan.

The property owner will be informed in writing if Council is reviewing its discharge fractions. Council will cover costs associated with reviews it initiates.

In exceptional circumstances, which may include changes to equipment, technology or business practices, an application for a discharge fraction variation may also be accepted from an organisation representing a group of similar businesses. However, in this instance, the organisation must show that the information supporting its application is representative of a business or all similar businesses discharging into Council’s sewerage system.

Where a discharge fraction is varied from the table included with the management plan or a previous discharge fraction, the property owner will be advised in writing of the variation. The variation will be effective from the next billing period and will not be applied retrospectively.

The applicant will also be advised in writing if Council does not believe the information provided justifies a variation to the discharge fraction.

Table A3: Trade Waste Discharge Factors

Factor INDUSTRY	DISCHARGE FACTOR %
Aged care/nursing home	80
Animal Care	70
Automotive	90
Bakery	85
Boiler making/engineering	90
Bowling Club	70
Brewery/Distillery	80
Butcher	90
Car Detailing	90
Car Wash	70
Carpet Cleaner	90
Chemical manufacturers	90
Chicken Poultry shop	90
Child care/kindergartens/Day care/child care centres	80
Commercial Laundromat	92
Concrete Batching Plant	5
Crafts/Stonemason	80
Dentists	80
Engineering Works/Workshop	70
Fast Food	80
Fishery	90
Food Processor	90
Golf Clubs	90
Guest House/Boarding house	90
Hairdresser/Salon	90
Hospital	90
Hotel/Tavern/Night Club	90
Marinas	90
Medical Centre	80
Mixed Industries	90
Motels	90
Nursery/Landscaping	20
Nursing Home	50
Office Blocks	90
Panel Beating/Spray Painting	70
Printing	85
Restaurant	90
Schools/Universities	80

Seafood (wholesale/retail)	90
Service Station/car washes	90
Shopping Centre	90
Swimming Pool Complex	50
Takeaway	80
Utility (electricity, telephone, water, sewerage)	90
Veterinary Clinic	70
Workshop – mechanical/engineering	90

APPENDIX 4

PROHIBITED SUBSTANCES FOR SEWERAGE

(As per *Water Supply (Safety & Reliability) Act 2008*)

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

Examples of solids or viscous substances that are prohibited substances if of a size or in the quantity mentioned in item 1 –

- ash, cinders, sand, mud, straw and shavings
- metal, glass and plastics
- paper and plastic dishes, cups and milk containers whether whole or ground by garbage grinders
- rags, feathers, tar and wood
- whole blood, paunch manure, hair and entrails
- oil and grease.

1. A flammable or explosive solid, liquid or gaseous substance (including petrol).
2. Floodwater, rainwater and stormwater, and roof water, seepage water, subsoil water and surface water.
3. 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.

Example of substances under item 4 – substances with a pH lower than 6.0 or greater than 10.0 or having another corrosive property.

4. A substance at a temperature of more than –

- If the local government has approved a maximum temperature for the substance – the approved maximum temperature; or
- If paragraph (a) does not apply – 38ºC.

APPENDIX 5

PEAK HOURLY FLOW RATE FOR GREASE ARRESTOR SIZING

FIXTURES & FITTINGS	CAPACITY (L)
Bain Marie Water heated	Use maximum capacity of apparatus x 3
Bin Wash/Wet Garbage	500
Cleaners Sink	140
Combi Oven (small to medium kitchens)	300 – 600 (assessment required)
Combi Oven (continual daily use, i.e. supermarkets, fast food chains)	3000L grease arrestor minimum size
Dishwasher – Large (>1 outlet)	manufacturers peak hourly flow rate x 3
Dishwasher – Medium (Upright)	300
Dishwasher – Small (Under Bench)	150
Display Cabinet	30
Floor Waste	50
Grated Strip Drain	50 litres per metre
Greasy canopy (water cleaned)	50
Hand Basin	30
Noodle Cooker	100
Potato Peeler – Large	manufacturers peak hourly flow rate x 3
Potato Peeler – Medium (Upright)	200
Potato Peeler – Small (Bench Type)	100
Prover	400
Rotisserie Rack	100
Salamander	50
Sink – utility/pot per outlet connected separately to drain (Depth >300mm)	300
Sink – Single Bowl (Depth <300mm)	150
Sink – Double Bowl (Depth <300mm) Fixture pair	300
Trough	35
Tundish (other than refrigerant condensate)	10 plus any other listed connected apparatus
Wok burner dry	30 per arm
Wok burner wet	manufacturers peak hourly flow rate x 3

-Takeaway restaurants e.g. chain franchises – Minimum 3000lt grease trap

-Contact Council's Trade Waste Officer for clarification before installation of any fixtures.

APPENDIX 6

ON-SITE PRE-TREATMENT TRADE WASTE GUIDELINES

BUSINESS TYPE	BASIC PRE-TREATMENT REQUIREMENTS
Workshops	
Automotive Industries Service Station, Car Detailers	Dry basket arresters, Oil Silt interceptor with a capacity greater than the peak hourly flow (L/hour).
Mechanical Workshops	Dry basket arresters, Oil Silt interceptor with a capacity greater than the peak hourly flow (L/hour).
Equipment hire companies, truck wash (external only)	Dry basket arrester, silt and solid settlement pit, Oil Silt interceptor with a capacity greater than the peak hourly flow (L/hour). Medium to Large specialised type truck wash company may require a prewash facility to remove bulk soils, solids shall be removed by a certified waste contractor
Radiator repairs	Capture the radiator fluid in a tray or container before removing the radiator from the vehicle. Where possible, re-use radiator fluid, otherwise capture and store it for off-site removal by a licenced contractor. Floor must be bunded to prevent spillage draining to sewer.
Service station, covered forecourt/driveway/bus/coach depot refuelling bay	May require a specialist fuel diversion system incorporating alarms, emergency stop flow switches etc, case by case assessment. Oil Silt interceptor with a capacity greater than the peak hourly flow (L/hour)
Food Services	
café/Canteen/Cafeteria cooking on site	Standard grease arrestor sizing*
Chicken (Fresh) cutting and preparation of fresh meat	Standard grease arrestor sizing*
Chicken Cooking (Minor Retail) BBQ, charcoal, rotisserie	Standard grease arrestor sizing*
Coffee Shop/Sandwich Shop/Sandwich Bar no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
Coffee Shop/Sandwich Shop/Sandwich Bar cooking on site	Standard grease arrestor sizing*.
Commercial Kitchen hotel, motel, function centre, hospital, restaurant	Standard grease arrestor sizing*. Garbage grinders NOT permitted

Community Hall Kitchens minimal or no food preparation at site	No pre-treatment required. Good clean production practices by staff
Community Hall Kitchens cooking at site	Standard grease arrestor sizing*.
Doughnut Shop cooking at site	Standard grease arrestor sizing*.
Fast Food Outlet – Major Franchise (including McDonalds, Hungry Jack's, KFC, Pizza Hut, Nando's, Red Rooster, Brodies' etc)	Standard grease arrestor sizing* but minimum of 3000lt.
Fish and Chip Shop	Standard grease arrestor sizing*.
Hotel/Motel/Bar/Nightclub no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean sop keeping practices by staff
Hotel/Motel/Bar/Nightclub With counter lunches, cooking at site	Standard grease arrestor sizing*.
Ice Cream Parlour without hot food takeaway	No pre-treatment required. Good clean production practices by staff
Ice Cream Parlour with hot food takeaway	Standard grease arrestor sizing.
Pizza Shop (not a major chain)	Standard grease arrestor sizing*.
School Canteen no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
School Home Science/Hospitality Kitchen	Standard grease arrestor sizing*.
Tertiary Institution Kitchen/Canteen/Cafeteria	Standard grease arrestor sizing*.
Specialty Foods	
Bakery (Retail) no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
Bakery (Retail) cooking on site (pastries, pies, sausage rolls etc)	Standard grease arrestor sizing*.

Butcher (Retail)	Standard grease arrestor sizing*.
Delicatessen No meat preparation cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
Seafood (Retail) – Fresh no food cooked on site, no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
Seafood (Wholesale) – Fresh no food cooked on site, no cooking, serving of foods or washing up on site	1000lt solids settlement pit/tank. Dry basket arresters for fish filleting
Food Manufacturing	
Food Manufacturing – Minor (<5000 kL/annum discharge)	No pre-treatment required*.
Service Industries	
Beautician/ Hairdressing Salon	Floor waste basket arrester. Head wash basin arrester. Good clean production practices by staff. Avoid discharge through grease arrester
Laundry (coin operated) e.g. laundromat, laundrette	1mm mesh lint screens must be in place (washing machine internal screens acceptable). Cooling pit may be required to ensure that discharge is below 38º C.
Laundry Commercial/Industrial	Trade Waste Consultant recommended
Dry cleaning	Dry cleaning fluids/solvents are prohibited substances
School Science Laboratory	Neutralising/silt trap with a capacity greater than the peak hourly load (L/hour).
Glass cutting including windscreens	Solids settling tanks, minimum size 1000lts
Care Facilities	
Day Care Centre no cooking, serving of foods or washing up on site	No pre-treatment required. Good clean production practices by staff
Day Care Centre cooking on site	Standard grease arrestor sizing*.
Hospital Kitchen	Standard grease arrestor sizing*.
Nursing Home Kitchen	Standard grease arrestor sizing*.
Retirement Village Kitchen	Standard grease arrestor sizing*.
Health Related Industries	

Dental surgery	Amalgam separator built into cuspidor by manufacturer, Plaster arrester as required
Medical facilities, Hospitals etc. Plaster Casts	Plaster arrester
Xray	Neutralising balancing tank to be installed. Silver recovery unit to be installed or remove all silver bearing material by licenced contractor
Doctors surgery, medical centre	Sharps are prohibited substance
Optical services, grinding of plastics	Settling tank with baffles
Commercial Process	
Public Swimming Pools including schools	Specialist treatment plant design, backwash shall not discharge to sewer at a rate >2 litres/sec. discharge other than standard backwash must be approved by WRC officer Pool overflow from rainfall or stormwater runoff shall not be discharge to sewer. Where there are environmental concerns related to the discharge of overflow WRC shall be consulted
Commercial vehicle wash facility	Specialist treatment plant design, backwash shall not discharge to sewer at a rate >2 litres/sec. rainwater and stormwater are prohibited discharges, complex diversion system may be required. Maintenance schedules must be provided, water reuse is a priority
Bin Wash associated with commercial and multi residential premises only (>9 wheelie bins)	Basket arresters with self-closing mechanism or secondary fixed strainer, provide a hose tap with RPZ Device adjacent. Bin wash Area must be roofed, bunded and graded to prevent ingress of stormwater. Details of preventative measures must be provided. Where a roofed area is unfeasible, and a diversion/first flush valve system is proposed, a strict maintenance regime must be implemented by the body corporate. 1m x 1m bunded area is acceptable in lieu of a roofed enclosure (wheelie type bins only, not bulk bins)
Cooling Tower Condensate and Blowdown (A/C only) where this is the only trade waste discharge from site	No specific pre-treatment required. Discharge flow rates to be controlled, the use of products containing chromate is prohibited.
Animal Industries	
Kennels	Dry arrester pit, hair/lint filters
Stables	Dry arrester pit, hair/lint filters
Veterinary facility	Solid waste and contaminated infectious waste are prohibited substances

**Install basket arresters:*

- in-sink dry basket arrestor with fixed secondary strainer to all sink wastes.

- in-floor dry basket arrestor with fixed secondary strainer.

APPENDIX 7

APPLICATION GUIDE FOR SUBMISSION OF HYDRAULIC PLANS:

1. Hydraulic plan drafting standards

- A3 sheet size as a minimum
- Designers name contact details and licence details
- Site/locality and tenancy plan
- Existing services relevant for connection of new works
- North point
- Sanitary drain house connection point and levels in AHD
- Proposed and existing pipe and surface levels in AHD
- Floor plan to a 1:100 scale
- Legends, abbreviations and symbols and required

2. Details of each trade waste generating area, including:

- a description of trade waste generating activities linked to each trade waste generating area
- the designed peak trade waste flow rate (litres per hour)

3. Roofing and sheeting details for external trade waste generating areas, including:

- a diagram of the roof and overhang of external trade waste generating areas showing the minimum length of overhang on open walls to be at least 25 per cent of the height of the roof from the finished ground level
- details of diversion valves or first flush systems if roofing is not feasible

3. Details of all pre-treatment systems, including:

- the manufacturer's name
- the pre-treatment system type and model number
- the pre-treatment system capacity specified by the manufacturer and the expected hydraulic load on the pre-treatment system
- the type and rating of the pump which must be matched to the manufacturer's specifications for the pre-treatment system, if the wastewater is to be pumped
- a hose tap, with a testable RPZ device located within five metres of each pre-treatment device
- pre-treatment system is accessible for maintenance (for guidance, it is recommended that the hardstand area be no further than 15 metres from the pre-treatment device) Where this condition cannot be achieved due to site constraints an approved 80mm pump suction line shall be installed. Index length of suction line shall be <30m with a maximum of 4m lift

4. Details of hydraulic load allocated to pre-treatment equipment, including:

- an information schedule of the form shown below, for transparency about how trade waste hydraulic loads have been allocated to pre-treatment devices
- details of the arrestor that will service each tenancy if there is more than one tenancy on the premises,
- details of the total peak hourly flow directed to each arrestor
- updated details of new hydraulic loadings where a connection, disconnection or change to connection affects an existing trade waste installation
- details of estimated peak trade waste flow for all shops connected to the shared arrestor where a new shop fit-out is to be installed at a premise resulting in multiple tenancies connected to a shared arrestor.