



TRADE WASTE MANAGEMENT PLAN

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1. INTRODUCTION

Liquid wastes are produced by a variety of industrial, commercial and domestic activities. The *Environmental Protection Act 1994* provides a general prohibition against the pollution of the environment by the discharge of such wastes, except where the person or agency holds an environmental authority permitting such discharge.

All discharges to receiving waters are required to be treated to a standard that will maintain or enhance receiving water quality and environmental values.

Liquid waste generated by industry, small business and commercial enterprises is referred to as Trade Waste. The *Water Supply (Safety and Reliability) Act 2008* prohibits the unauthorised discharge of wastes, other than domestic sewage, into sewerage systems. The options for producers of trade waste are to have it treated at an approved treatment facility, obtain approval from Council to discharge Trade Waste to a sewerage system, or to obtain an environmental authority under the *Environmental Protection Act 1994* to treat the Trade Waste themselves before discharging the Trade Waste to the environment.

Banana Shire Council provides sewerage systems primarily for transporting and treating domestic sewage. Payment for this service is by a utility charge levied on rateable properties. Sewerage systems 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 sewerage systems, charges are applied for the discharge of Trade Waste to sewerage systems. The Council is required to meet the conditions of Environmental Approvals issued by the Queensland Government for a sewerage system, including the disposal and reuse of treated Trade Waste and biosolids. The Council is also required by the *Water Supply (Safety and Reliability) Act 2008* to consider the effect of Trade Waste on a sewerage system and the environment before issuing a Trade Waste Approval.

Under the *Environmental Protection Act 1994*, Council is held responsible for any pollution from stormwater outfalls under its control. The discharge of Trade Waste to stormwater drainage is prohibited under the *Local Government Act 2009*, Chapter 3 Section 79(1). Stormwater drainage shall only be used for the disposal of uncontaminated stormwater runoff.

Domestic sewage consists mostly of water, which, after treatment to reduce biodegradable material, suspended solids, and nutrients, can be disposed of in accordance with the requirements of Council's Environmental Approvals. Council seeks opportunities to reuse and recycle treated water and biosolids.

Trade Waste may have an organic strength many times that of domestic sewage and may overload the treatment facility. Trade Waste may also contain other substances such as high levels of fats and grease, heavy metals, organic solvents and chlorinated organic substances, which sewerage systems are not designed to contain or treat.

These substances may:

- a) pose a serious risk to the health and safety of sewerage workers;
- b) damage the infrastructure of sewerage systems;
- c) inhibit biological processes at treatment plants;
- d) accumulate in biosolids, making their reuse difficult or impracticable; or
- e) pass through treatment plants untreated resulting in environmental contamination

To ensure the continued protection of our environment and waterways, Council's policy is to accept biodegradable Trade Waste into a sewerage system, subject to the conditions that:

- a) the sewerage system has adequate capacity to effectively collect, transport and treat the Trade Waste; and
- b) all practicable waste minimisation, recycling and reuse options have been applied by the Trade Waste Generator.

The discharge of waste containing substances in amounts liable to be toxic, hazardous or which may cause unacceptable impacts to a sewerage system, treatment process, personnel or the environment is prohibited.

Council may consider the acceptance to sewer of Trade Waste containing toxic or hazardous substances and non-degradable pollutants only after the Trade Waste has been pre-treated by on-site "best practicable treatment" to ensure sewer admission limits are not exceeded.

2. DEFINITIONS

Approval or Trade Waste Approval

Means a written conditional approval by Council pursuant to the *Water Supply (Safety and Reliability) Act 2008* for a Generator to discharge Trade Waste to Council's sewerage system in accordance with the conditions specified in the Approval. The conditions pertaining to Trade Waste Approvals are dependent upon the particular circumstances of the Generator and the category of its wastewater.

Written approval is required for a person or corporation whose business type is classified as Trade Waste Category 1, Category 2, Category 3, Category 4 or Category 5, to discharge liquid waste to sewer. The Approval states the terms and conditions to be met by the approval holder with respect to the discharge of Trade Waste.

Arrestor

Means an apparatus designed to intercept and retain silt, sand, oil, grease, sludge and/or other substances in Trade Waste.

Authorised Agent

Means a person notified in writing to the Council as being appointed or authorised by the Owner to act on the Owner's behalf.

BCCMA

Means the *Body Corporate and Community Management Act 1997*.

Biosolids

Means the solid by-product of municipal wastewater treatment. This material contains solids produced by treatment and/or decomposition of organic constituents of wastewater, and may be applied beneficially to agricultural land or other uses according to guidelines, or disposed appropriately (eg landfill). Substances that may have potential to contaminate biosolids are controlled by regulation of trade waste quality.

BOD₅

Means Biochemical Oxygen Demand.

BUGTA

Means the Building *Units and Group Titles Act 1980*.

Category 1, 2, 3, 4 or 5 Approval

Means a written conditional approval by Council pursuant to the *Water Supply (Safety and Reliability) Act 2008* for a generator and/or owner to discharge Trade Waste into Council's Sewerage System in accordance with terms and conditions specified in the approval.

Category 1, 2, 3, 4 or 5 Trade Waste

Means Trade Waste described as Category 1, 2, 3, 4 or 5 in Section 5.0 (Discharge Categories).

Category 1, 2, 3, 4 or 5 Trade Waste Generator

Means a Generator or Trade Waste Generator whose activity produces Trade Waste described as Category 1, 2, 3, 4 or 5 in Section 5.0 (Discharge Categories).

COD

Means Chemical Oxygen Demand.

Council or The Council

Means the Banana Shire Council or any person appointed or authorised by the Banana Shire Council to act on behalf of Council.

Domestic Sewage

Means faecal matter and urine of human origin and liquid household wastes from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings.

Force Majeure

Means any event that is beyond the control of either party, including without limitation,

- a) An act of God, for instance lightning, flood, earthquake;
- b) Breakdown of or destruction of plant or equipment;
- c) Reduction in the volume of wastewater entering the wastewater treatment works from Council's trunk sewers;
- d) Shortage of or inability to secure fuel, power, materials or labour;
- e) Inability to secure or shortage of transportation;
- f) Industrial disputes, strike, lockout or labour difficulty;
- g) Government act or regulation;
- h) Fire or explosion.

Generator or Trade Waste Generator

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

Human wastes

Means human faecal substances and urine.

Owner

Means the Owner of Premises or a Premises Group as defined in the *Local Government Act 2009*.

Premises

Means a lot as defined in Chapter 1, Part 3, Division 3, Section 10 of the *Planning Act 2016*, or 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.

Premises Group

Means the land comprising 2 or more Premises where all the owners have mutual rights and obligations under the *Body Corporate and Community Management Act 1997* (BCCMA) or the *Building Units and Group Titles Act 1980* (BUGTA) for the purpose of their respective ownerships, and includes the common property forming part of:

- a) if the Premises are lots included in a community titles scheme under BCCMA – the scheme land for the scheme; or
- b) if the Premises are lots under BUGTA – the parcel of which the Premises form part.
- c) in this Plan, unless the meaning conflicts, Premises Group shall be treated as Premises.

Prohibited Substances

Means a substance prescribed in Schedule 1 of the *Water Supply (Safety and Reliability) Act 2008*.

Regulated Waste

Means non-domestic waste as defined in Schedule 7 of the *Environmental Protection Regulation 2019* (whether or not it has been treated or immobilised) and includes:

- a) for an element – any chemical compound containing the element; and
- b) anything that contains residues of the waste.

Regulated Waste Carrier

Means a carrier transporting Regulated Waste, including the removal of liquid Regulated Waste from premises by tankers.

Sewage

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

Sewer Admission Limits

Means the limits specified in Appendix B (as amended from time to time) that specify the maximum permitted concentrations for certain pollutants contained in Trade Waste, and physical properties such as the temperature and the permitted pH range of Trade Waste that may be discharged into a sewerage system.

Sewerage or sewerage systems

Means a sewer or pipe, access chamber, vent, engine, pump, structure, machinery, outfall or work used to receive, store, transport or treat sewage.

Stormwater

Means water resulting from natural precipitation.

Stormwater drainage

Means infrastructure owned or operated by Council that is used to receive, store, transport or treat stormwater, and consisting of some or all of the following:

- a) Drains;
- b) Channels;
- c) Pipes;
- d) Chambers;
- e) Structures;
- f) Outfalls and
- g) Any other infrastructure required to receive, store, transport and treat stormwater.

Temporary Approval

Means a Trade Waste Approval containing terms and conditions under which a Trade Waste Generator and or Owner may make a one-off discharge of Trade Waste to a sewerage system.

Trade Waste or Trade Waste Discharge

Means the water-borne waste from business, trade or manufacturing premises, other than:

- a) waste that is a prohibited substance; or
- b) human waste; or
- c) stormwater

Trade Waste Fees & Charges

Means fees & charges set by Council to cover the costs of Trade Waste control activities, conveyance, treatment, recurring administration and overheads associated with Trade Waste management.

Trade Waste Improvement Program

Means a program of works and improvements as described in section 6.3 that will improve the Generator's Trade Waste quality and maintain such improved quality to satisfy the requirements of the general limit parameters of the Sewer Admission Limits.

Trade Waste Compliance

Means a person appointed by the Council to carry out the functions described in section 3.1 (Coordinator Reticulation)

Trade Waste Generator

Refer to Generator

Treated Water

Means the liquid discharged following a municipal wastewater treatment process.

TWIP

Means Trade Waste Improvement Program

Waste Disposal Unit

Means a mechanical or motor driven waste disposal unit that is approved by the Council for the discharge of Trade Waste to a sewerage system.

Waste Disposal Unit Base Charge

Means a sewerage charge applied on a cost per unit basis permitting a Waste Disposal Unit to discharge Trade Waste to a sewerage system. This is calculated on the basis of power of the motor of the Waste Disposal Unit.

Waste Macerating or Pulverising Device

Means a mechanical or motor driven device that is used for the macerating or pulverising of a solid waste.

WSAA

The Water Services Association of Australia

NWSMG

The National Wastewater Source Management Guidelines (July 2012). Published by the WSAA

3. COUNCIL EMPLOYEES

3.1 COUNCIL MANAGEMENT OF TRADE WASTE

Trade Waste compliance will be managed by Council's Water Services section with day to day responsibilities related to Council's Coordinator Reticulation, including but not limited to the following:

- a) oversee the disposal of Trade Waste in accordance with this Trade Waste Plan;
- b) provide advice on acceptable methods of disposal of Trade Waste, including legal, economic and environmental aspects;
- c) identify industries that do not discharge Trade Waste to a sewerage system but which have the potential to contaminate a sewerage system or stormwater drainage by accidental discharge of prohibited substances;
- d) maintain a waste register of industries to enable the tracking of liquid industrial waste transported from the point of generation to authorised disposal sites;
- e) deal with non-compliance of generators with requirements for the discharge of Trade Waste; and
- f) Develop and implement Trade Waste charging procedures.

4. CONTROL OF TRADE WASTE

4.1 RELEVANT LEGISLATION

Legislation relevant to the control of Trade Waste and the acceptance of Trade Waste to sewerage systems is listed in (Appendix A). The list of legislation in Appendix A is not a complete listing of all legislation pertaining 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 a 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 a sewerage system must apply for a Trade Waste Approval.

It is an offence under the *Local Government Act 2009* for a person to discharge waste (including Trade Waste) other than uncontaminated stormwater to stormwater drainage.

4.2 SUSPENSION OR CANCELLATION OF TRADE WASTE APPROVAL

Grounds for suspension or cancellation of a Trade Waste Approval and the procedures to be followed are defined in section 182 (Criteria for suspending or cancelling trade waste approval) of the *Water Supply (Safety and Reliability) Act 2008*.

Failure to pay charges and fees will constitute grounds for suspension or cancellation of a Trade Waste Approval. The terms and conditions of a Trade Waste Approval in respect of any matter occurring before the suspension or cancellation, including the payment of charges owing, shall continue to have force and effect after the suspension or cancellation of the Trade Waste Approval.

4.3 PENALTIES AND RECOVERY OF COSTS

The Council may prosecute any person who commits a breach of the *Water Supply (Safety and Reliability) Act 2008* or the *Local Government Act 2009* and its subordinate legislation, the *Plumbing and Drainage Act 2018*, the *Plumbing and Drainage Regulation 2019*, or who refuses or neglects to comply with any direction or requirement by Council pursuant to the above legislation. The legislation cited above provides for penalties, which include substantial fines.

Where it can be shown that a Generator has contravened, or is contravening, the above cited legislation or has failed to comply with the Generator's Trade Waste Approval, the Council may recover costs of repairing damage to a sewerage system (including treatment plant infrastructure) caused by discharge of a prohibited substance by the Generator.

Notwithstanding the possession of a Trade Waste Approval, any illegal discharges or non-compliance with approval conditions by a Generator may lead to action being taken against the Generator under the provisions of the *Water Supply (Safety and Reliability) Act 2008* or other relevant legislation.

5. DISCHARGE CATEGORIES

All Trade Waste accepted to the sewer will be classified according to the following five categories for the purposes of issuing Trade Waste Approvals and charging.

Acceptance of Trade Waste under any category is conditional on the Trade Waste meeting Council's Sewer Admission Limits (Section 6.1 and Appendix B) unless otherwise specified in the Trade Waste Approval. Component limits will be applied on the basis of concentrations and daily mass loads.

It is the responsibility of the Trade Waste Generator to install, operate and maintain

"best practice" pre-treatment devices or processes to ensure sewer admission limits as approved for that generator are not exceeded.

In the event of a significant change in the strength or volume of Trade Waste discharge approved under Category 1, 2, 3 or 4, the Manager Water Services or delegate at his/her discretion may treat the waste as a Category 5 Trade Waste discharge for the purposes of charging and monitoring.

Category 1 - General Low impact

Generators where nil or minimal pre-treatment is required. This includes businesses such as hairdressers, dental, veterinary, optical, photographic processing, hobby clubs and the like.

Category 2 - Mechanical

Generators where mineral oil removal devices are or should be used as the arrestor. This includes uses such as mechanical workshops, panel beaters, wash bays, detailers, small plant, equipment maintenance and the like.

Category 3 - Food Preparation

Generators where grease traps are or should be used as the arrestor. This includes uses such as restaurants, cafes, fast food outlets, butchers, bakeries, bowls clubs, other sporting clubs where kitchen operating and the like.

Category 4 - High flow, low concentration

Generators where nil or minimal pre-treatment is required and the discharge is of low strength but high volume. This includes uses such as laundries, laundromats, carwash facilities, commercial swimming pools and the like.

Category 5 - Major industry

Generators requiring pre-treatment devices as a standard, where the waste is of high strength and high flow (> 15kL/d) discharge occurs. This includes industries such as abattoirs, breweries, fermentation/yeast manufacturers, foundries, ice-cream manufacturers, rendering, tanneries and the like.

6. SEWER ADMISSION LIMITS

6.1 SEWER ADMISSION LIMITS

Any Waste discharged to a sewerage system shall comply with the Sewer Admission Limits unless otherwise specified in the Trade Waste Approval. The Sewer Admission Limits are subject to periodic review.

The Sewer Admission Limits, unless otherwise specified in the Trade Waste Approval, are absolute maximums. The dilution of trade waste with water to achieve compliance with the sewer admission limits is prohibited. Council has obligations to avoid sewer overflows and consequently may impose limits on the rate and timing of Trade Waste discharges.

Unless specified otherwise in the Trade Waste Approval, any Trade Waste discharged to a sewerage system shall at all times comply with the Trade Waste Sewer Admission Limits. Any substance not listed in the schedules defining the Sewer Admission Limits shall not be discharged without prior approval of Council. Approval of such unlisted substances is entirely at Council's discretion and will require specific

demonstrable evidence based on degradability and toxicity for the unlisted substance.

Domestic sewerage drains shall not be connected to the arrestor or pre-treatment device.

The Council requires that Trade Waste Generators implement waste minimisation practices and install best practice pre-treatment processes to reduce both the volume and the contaminant load of Trade Waste discharged to a sewerage system.

The Council may, at its discretion, negotiate with a Trade Waste Generator to accept the discharge to a sewerage system of Trade Waste that exceeds the Sewer Admission Limits.

6.2 SUPPLEMENTARY MONITORING

Where a Generator regularly exceeds Sewer Admission Limits for one or more Trade Waste components, Council may at its discretion, initiate a Supplementary Monitoring Program.

Under the Supplementary Monitoring Program, sampling of the Generator's Trade Waste will be carried out at intervals determined by Council and at the generators cost and the results of such sampling will be considered to apply appropriate charges based on the risk of such parameters.

The period of the supplementary monitoring program will be determined by the Manager Water Services by taking into account the impact and severity of the excessive loads caused by the Trade Waste components.

The Generator will be liable for all sampling, analysis and reporting costs of such supplementary monitoring.

6.3 TRADE WASTE IMPROVEMENT PROGRAM

For Category 1, 2, 3 and Category 4 generators, the installation of a properly sized, approved best practice pre-treatment devices, together with an approved maintenance program in accordance with the Trade Waste Approval shall be deemed to provide a satisfactory Trade Waste with respect to the general limit parameters of the Sewer Admission Limits.

The Manager Water Services may, at his/her discretion, negotiate with a Category 5 Trade Waste Generator for the discharge to a sewerage system of Trade Waste that exceeds one or more general limit parameters of the Sewer Admission Limits. Additional charges may be imposed for this relaxation.

Alternatively, where a supplementary monitoring program indicates that the Generator is unable to demonstrate that satisfactory compliance with the general limit parameters of the Sewer Admission Limits can be achieved, the Generator may be required to develop a Trade Waste Improvement Program (TWIP) as a condition of continuing approval to discharge Trade Waste.

Should a TWIP be required, the Generator will be required to submit a TWIP in a set timeframe as determined by the Manager Water Services.

6.4 REQUIREMENTS OF A TRADE WASTE IMPROVEMENT PROGRAM

The TWIP shall contain a program of works and improvements that will improve the Generator's Trade Waste quality and maintain such improved quality to satisfy the requirements of the general limit parameters of the Sewer Admission Limits or negotiated limits as applicable. This submission shall include; but not necessarily be limited to:

- a) a description of the existing Trade Waste quantity and quality of its constituents;
- b) a discussion of available waste prevention, minimisation and recycling options;
- c) a discussion of available options for the conservation of water;
- d) provision for self-monitoring and reporting of discharge quantity and quality;
- e) a program of works to deliver waste reduction and pre-treatment processes which will reduce contaminant levels below the general limit parameters of the Sewer Admission Limits over a specified period, which will be not more than two years unless approved by the Manager Water Services ; and
- f) expected outcomes, timelines and milestones.

The Council will respond to the Generator within 21 working days, and may accept or not accept the proposed TWIP. If the Program is not accepted, Council will advise the reasons for not accepting the Program, and may request further information or advice.

The Generator will be required to respond to Council's request and provide any further information requested within 28 working days.

Council may require one or more further reports at certain intervals to provide information on progress and achievements.

Where Council requires an existing Category 5 Trade Waste Generator to develop a TWIP, but the Generator is unable to provide a submission within the time frame required, the Generator must submit a request for extension of time, providing details of the progress of the investigations, and including reasons for requesting the extension of time.

Council may at its discretion allow the extension of time, subject to conditions.

7. TRADE WASTE CHARGES AND FEES

7.1 LEVYING OF CHARGES

Trade Waste Charges and Trade Waste Fees are levied under the *Local Government Act 2009*, Chapter 4 Finances and accountability Part 2 Section 97 and the *Local Government Regulation 2012*, Chapter 4 Rates and charges, Part 7 Utility charges Section 99.

Trade Waste Charges and Trade Waste Fees to be levied for the ensuing financial year shall be determined by Council resolution

Trade Waste Charges and Trade Waste Fees for the current financial year are available from Council.

Accounts for Trade Waste Charges will be issued half yearly, and shall be a debt due by the owner of the premises which are the subject of a Trade Waste Approval. If not paid

within the prescribed time after service of the demand, the debt shall bear interest at such rate per centum per annum as shall be fixed by the Council by resolution. The amount owing, including interest, shall be recoverable in the same manner as general rates and shall until paid be a charge on the premises, which are the subject of a Trade Waste Approval, and in addition may be recovered as a debt from any subsequent owner of the Premises.

Failure to pay shall be cause for cancellation or suspension of an Approval or Approvals under section 4.2 of this Trade Waste Plan.

7.2 TRADE WASTE CHARGES

Trade Waste has five categories for charging purposes (section 5). Charges are set to recover the cost of conveyance, treatment, recurring administration and overhead costs associated with Trade Waste management. Charges also include a component that recognises the risk of receiving excessive or toxic loads from a particular generator. Trade Waste fees & Charges are adopted by Council Annually.

7.2.1 GENERAL TRADE WASTE CHARGES

Component charges are based on the actual quality and quantity of Trade Waste discharged in the charging period.

Charges will be determined as follows:

Category 1 Charges - General Low impact

Generators where nil or minimal pre-treatment is required. This includes uses such as hairdressers, dental, veterinary, optical, photographic processing, hobby clubs and the like.

Where a Trade Waste Generator discharges waste to sewer in excess of the levels described in the Sewer Admission Limits (Appendix B) then additional charges for over-limit discharge shall apply as noted in section 7.4.

Category 2 Charges - Mechanical

Generators where mineral oil removal devices are or should be used as the arrestor. This includes uses such as mechanical workshops, panel beaters, wash bays, detailers, small plant, equipment maintenance and the like.

Where a Trade Waste Generator discharges waste to sewer in excess of the levels described in the Sewer Admission Limits (Appendix B) then additional charges for over-limit discharge shall apply as noted in section 7.4.

Category 3 Charges - Food Preparation

Generators where grease traps are or should be used as the arrestor. This includes uses such as restaurants, cafes, fast food outlets, butchers, bakeries and the like

Where a Trade Waste Generator discharges waste to sewer in excess of the levels described in the Sewer Admission Limits (Appendix B) then additional charges for over-limit discharge shall apply as noted in section 7.4.

Category 4 Charges - High flow, low concentration

Generators where nil or minimal pre-treatment is required and the discharge is of low strength but high volume. This includes uses such as laundries, laundromats, carwash facilities, commercial swimming pools and the like.

Where a Trade Waste Generator discharges waste to sewer in excess of the levels described in the Sewer Admission Limits (Appendix B) then additional charges for over-limit discharge shall apply as noted in section 7.4.

Category 5 Charges - Major industry

Generators requiring pre-treatment devices as a standard, where the waste is of high strength and high flow (> 15kL/d) discharge occurs. This includes uses such as abattoirs, breweries, fermentation/yeast manufacturers, foundries, ice-cream manufacturers, rendering, tanneries and the like.

Where a Trade Waste Generator discharges waste to sewer in excess of the levels described in the Sewer Admission Limits (Appendix B) then additional charges for over-limit discharge shall apply as noted in section 7.4, excepting where The Manager Water Operations determines that the over-limit discharge of a parameter or parameters may be beneficial to the operation of the Water Reclamation Facility.

7.2.2 ADDITIONAL CHARGES FOR OVER-LIMIT DISCHARGE

This charge applies:

- a) Where Council agrees to accept trade waste to its sewerage infrastructure and the trade waste has measured properties in excess of those defined in (Appendix B) of the Sewer Admission Limits, and these conditions of acceptance are defined in the Trade Waste Approval.
- b) 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 (Appendix B) without approval to exceed the limits.

This charge shall apply to each non-complying parameter in addition to the general charges under section 7.1, excepting non-complying parameters for which the Trade waste Approval specifically exempts those parameters from the payment for over-limit discharges.

7.2.3 EQUIVALENT ARRESTOR CHARGES

This charge applies where an existing waste stream requires the installation of an arrestor to provide best practice pre-treatment for Category 1, 2, 3 or Category 4 wastes, but site- specific conditions do not allow for appropriate devices to be installed.

In addition to the normal Category 1, 2, 3 or 4 charges (section 7.1), a charge equal to the average cost paid by other trade waste generators of similar waste type and quantity to have arrestors installed and regularly cleaned, will apply.

7.2.4 INSPECTION AND ANALYSIS FEES

The Trade Waste charges in all categories (section 7.3) allow for routine inspections and quality compliance auditing by Council. Where additional inspections and laboratory analyses are required because of non-compliance with Trade Waste Approval conditions, the full cost of additional works, as determined by the Manager Water Services, will be recovered from the holder of the Approval.

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.

7.2.5 FAILURE TO SERVICE PRE-TREATMENT DEVICES

A non-compliance charge will apply to any Generator and/or Owner who fails to service their pre-treatment device in accordance with the conditions stated on their Trade Waste Approval or any other notice issued by Council to the Generator and/or Owner.

7.2.6 APPLICATION FEES

Applications for approval to discharge Trade Wastes (all categories) shall be accompanied by the prescribed Application Fee.

Where there is a change of Generator or class of occupation for an existing Category 1, 2, 3 and 4 Trade Wastes approval, a new application must be submitted within 28 days and a re- application fee will apply.

7.2.7 NO REFUNDS

No refund shall be given in respect of any Application fee or Minimum Administration Charge when a generator ceases to discharge part way through the Trade Waste billing period.

8. APPLICATION PROCEDURES

A Trade Waste Approval application form signed by the Owner (or Authorised Agent) and the Trade Waste Generator, must be completed and submitted to Council before Council will permit the discharge of Trade Waste from premises to sewer. Applicants should contact Council's Water Services Section for advice on the type of application required and the procedures for obtaining a Trade Waste Approval.

Approvals gained from other areas of Council which may or may not include advice from the Water Services Section; do not constitute an approval to discharge Trade Waste.

A written Trade Waste Approval may be issued by the Manager Water Services or delegate.

Applications should be lodged and approved prior to commencement of generating trade waste. Examples of appropriate times for lodging applications may include:

- a) during the processing of a building application for a new premises or for the extension of an existing building intended for industrial or commercial usage; or
- b) on the change in tenancy of Premises intended for industrial or commercial usage; or
- c) on the change of ownership of Premises intended for industrial or commercial usage; or
- d) on the shop fit-outs of Premises intended for industrial or commercial usage; or
- e) during the processing of an application to strata title Premises for industrial or commercial usage; or
- f) prior to generating Trade Waste at existing Premises without a Trade Waste Approval; or
- g) where a change in process technology occurs that affects the quantity or quality of Trade Waste discharge.

Further information on trade waste application procedures, application forms and advice on trade waste issues, is available from Banana Shire Council in the following ways:

Banana Shire Council Customer Service Centre
62 Valentine Plains Road
Biloela QLD 4715
Email: enquiries@banana.qld.gov.au
Website: www.banana.qld.gov.au

or application forms will be forwarded on request by writing to:

Attention: Water Services
Banana Shire Council
PO Box 412
BILOELA QLD 4715

Applications for Trade Waste Approvals should include details of the proposed method of treatment to be used to ensure Trade Waste meets the Sewer Admission Limits. Three (3) copies of treatment plans should be forwarded with the application for the Trade Waste Approval. One (1) copy of the treatment plans will be returned stamped "Approved Trade Waste" if the proposal is satisfactory.

Applicants should note that failure to provide all information required to be submitted with an application for a Trade Waste Approval may result in delays in processing the application.

Plumbing and drainage work associated with installing any treatment process shall be completed in accordance with the *Plumbing and Drainage Act 2018 and Plumbing and Drainage Regulation 2019* the *National Plumbing and Drainage Code (AS/NZS 3500)* and the approved sewerage drainage plan for the Premises. The plumbing and drainage work shall be carried out by a licensed plumber and drainer. A Plumbing and Drainage Permit, or a Development Approval, or a Building Works Approval issued by Council will **not** be considered as an approval to discharge trade waste to sewer.

Approval to discharge Category 5 waste will be subject to a negotiated Approval and an application for this category must be accompanied by the Application Fee (section 7.8 and Appendix C).

Where a waste is deemed to be unsuitable for discharge to sewer, a Trade Waste Approval will **not** be issued and alternative arrangements for disposal of wastes will have to be made by the generator. General advice on treatment and disposal options for non-sewerable waste may be obtained from:

Banana Shire Council
Environmental Services
Ph: (07) 4992 9500

However, it is strongly recommended that the applicants seek from appropriately qualified private consultants.

9. TRADE WASTE APPROVALS

9.1 CATEGORY 1, 2, 3 AND 4 APPROVALS

The Trade Waste Generator shall hold a Trade Waste Approval if Premises are to be used for the discharge of Trade Waste to sewer.

A Category 1, 2, 3 or 4 Approval shall remain in force subject to annual renewal, unless

cancelled sooner in accordance with clause 4.2.

Category 1, 2, 3 and 4 Approvals are not transferable.

Approvals under Category 1, 2, 3 and 4 will contain the terms and conditions the holder of the Category 1, 2, 3 or 4 Approval shall observe to discharge Trade Waste into a sewerage system. The terms and conditions of a Category 1, 2, 3 and 4 Approval may include, but are not limited to:

- a) expiry/renewal date;
- b) the location of the premises and nature of the occupancy;
- c) the type and composition of Trade Waste that may be discharged;
- d) the quantity of Trade Waste that may be discharged;
- e) the rate that Trade Waste may be discharged, including maximum rate of discharge;
- f) the time when Trade Waste may be discharged;
- g) the period for which Trade Waste may be discharged;
- h) the method for estimating or measuring the volume of Trade Waste discharged;
- i) provisions for measuring and sampling the Trade Waste discharged prior to the Trade Waste entering a sewerage system;
- j) details of any pre-treatment of Trade Waste required;
- k) conditions for the maintenance of and removal of waste from pre-treatment equipment, including the frequency of cleaning and the waste transporter to be used;
- l) records to be kept concerning the cleaning and maintenance of pre-treatment equipment;
- m) the powers of the Council to enter Premises in relation to any matter about the control of Trade Waste;
- n) penalties for non-compliance with the Approval;
- o) conditions for the termination of the Approval;
- p) the obligations of the Trade Waste Generator with respect to the payment of Trade Waste Charges and Trade Waste Fees; and
- q) any other conditions considered by the Council to be appropriate.

9.2 CATEGORY 5 APPROVALS

The Trade Waste Generator shall hold a Category 5 Approval if premises are to be used for the discharge of Category 5 Trade Waste.

A Category 5 Approval shall be subjected to annual review, periodic review and amended to ensure the approval meets current circumstances unless cancelled sooner refer to section 4.2

Category 5 Approvals are not transferable.

A Category 5 Approval states the terms and conditions the holder of the Category 5 Approval shall observe to discharge Trade Waste to a sewerage system. The terms and conditions of a Category 5 Approval may include, but are not limited to:

- a) expiry/renewal date;
- b) the location of the Premises and nature of the occupancy;
- c) quality of waste that may be discharged;
- d) a statement that the quality of waste shall comply with Council's sewer admission limits as specified in Appendix B of this document (or attached to the Approval) and details of any allowed variations;
- e) quantity of Trade Waste that may be discharged;
- f) rate of discharge including maximum instantaneous and maximum daily flow;
- g) hours of day, days of week when discharge is allowed;
- h) any requirements for, or details of Trade Waste Improvement Program;
- i) details of self-regulation monitoring program including:
 - i. the sampling point;
 - ii. the frequency of sampling;
 - iii. the method of sample collection and type of sample to be collected;
 - iv. the analysis required;
 - v. the methods of analysis;
 - vi. the laboratory to be used; and
 - vii. the method of data transfer and availability to the Council;
- j) the type, design and location of flow measuring equipment and requirements for calibration;
- k) the methods to be used for estimation of data lost due to failure of sampling program or flow measurement instrumentation;
- l) the provision for measurement and sampling the Trade Waste prior to its discharge to a sewerage system;
- m) the pre-treatment processes to be used;
- n) the conditions for maintenance of, and removal of waste from, pre-treatment equipment including the frequency of cleaning and waste transporter to be used;
- o) the records to be kept concerning the cleaning and maintenance of pre-treatment equipment and disposal of waste;
- p) the powers of the Council to enter premises in relation to any matter with regard to the control of Trade Waste;
- q) the obligation of the Trade Waste Generator concerning any variations to operations or treatment processes that may affect the quality or quantity of Trade Waste discharged including a change of business type;
- r) the obligations of the Trade Waste Generator on the termination of the Category 5 Approval by expiry, discontinuance of discharges, change of ownership or occupier, or non-compliance with conditions of the Category 5 Approval;
- s) the obligations of the Trade Waste Generator with respect to the payment of Trade Waste Charges and Trade Waste Fees;
- t) penalties for non-compliance with Category 5 Approval;
- u) the conditions under which a difference or dispute between the Council, the Owner and the Trade Waste Generator which arise from the terms of the Category 5 Approval, if not resolved, may be submitted to arbitration;
- v) a force majeure clause; and
- w) any other conditions considered by the Council to be appropriate.

10. INSPECTION AND MONITORING

10.1 INSPECTION OF PREMISES

For the purpose of monitoring and auditing the conditions of discharge, the Council may routinely and randomly inspect all premises, which are the subject of a Trade Waste Approval.

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

- a) Checking installation is as per approval Trade Waste plan & fit for purpose.
- b) checking chemical storage areas to ensure that they are properly banded and are not improperly connected to a sewerage system;
- c) checking that there are no illegal stormwater connections to the Trade Waste system
- d) checking that there is no potential for Trade Waste to overflow improperly to a sewerage system, stormwater drainage or waterways;
- e) checking that there are no illegal Trade Waste connections to a sewerage system and that there is no potential for trade waste to overflow improperly to the sewerage system;
- f) checking that pre-treatment facilities are regularly and properly operated, maintained and serviced and standby equipment is available where necessary;
- g) collection of samples for analysis;
- h) monitoring of strength and flow is undertaken as required under the Trade Waste Approval;
- i) assessing work practices to ensure that they do not result in a breach of the Trade Waste Approval or legislation; and
- j) Quality Analysis;
 - i. waste type reclassification;
 - ii. account calculation;
 - iii. audit process; and
 - iv. pre-treatment equipment evaluation.

The Premises of Category 5 Generators will be inspected regularly. Inspections will usually be carried out in conjunction with the sampling visits required for charging purposes, but inspections may take place at any time by Council.

The Premises of Generators in Category 1, 2, 3 and 4 will be inspected periodically. Inspections will be carried out both randomly and specifically. Council may carry out random inspections as a general deterrent against non-compliance.

Specific inspections will be made when a random inspection has revealed a failure to comply and shall continue until the Generator is assessed to be in compliance with the Trade Waste Approval. Such specific inspections shall be made at the Generator expense.

Specific inspections will also be made against Generators who fail to prove compliance with the arrestor maintenance schedule.

Council's Trade Waste Officers shall be granted free and unrestricted entry to premises which are the subject of a Trade Waste Approval at all reasonable times and

shall not be obstructed from carrying out inspections.

10.2 INSPECTION CHAMBERS OR GAUGING FACILITIES

Large Volume Generators

Trade Waste Category 5 Generators, and where deemed necessary by the Manager Water Services, any other category of Generator, shall discharge Trade Waste to a sewerage system via an open channel inspection chamber or gauging facility. The inspection chamber or gauging facility shall be located on the Trade Waste discharge line in an area which is accessible at all times to allow for sampling or monitoring equipment to be installed and operated.

Category 5 Generators will be required to supply and install the following:

- a) Electromagnetic flow meter with 4-20 mA pulse output to measure volume and flow rate (totaliser non-re-settable);
- b) pH probe to measure discharge pH strength;
- c) conductivity probe and;
- d) Refrigerated automatic sampler, housed in a shed to protect the sampler from weather and environment.

Real time monitoring may be installed at Council's expense to record and transfer associated data to Council and Generator

Council requires the flow gauging equipment to be hardwired into the power supply. A suitable 240 volt power outlet must be provided for this purpose.

A standard water supply outlet with back-flow prevention device should be installed in accordance with Water Service Provider requirements at all gauging facility sites, within five metres of the sampling point.

For new Category 4 and Category 5 Trade Waste installations, the Trade Waste discharge line shall be separate from the domestic waste discharge line.

Arrestor trap installations and other pre-treatment devices on premises discharging Trade Waste shall have a sample point provided externally to the building, within the premises, at finished ground level.

For new Category 5 Trade Waste installations, the gauging facility (flow meter, sampling point and probes) shall be above ground to avoid confined space entry requirements.

11. DETERMINATION OF DISCHARGE QUANTITY

11.1 CATEGORY 4 TRADE WASTE

The volume of Trade Waste discharged to a sewerage system by new Category 4 Generators shall be measured by either one of the following methods:

- a) separately meter the water supply to the Trade Waste production area; or
- b) fit a discharge meter in accordance with section 11.2.

Subject to conditions, Council may allow the absence of either a Trade Waste water

meter or discharge meter for existing Generators, but:

- a) Council will not issue a Trade Waste Approval to a new Generator buying an existing business until compliance on flow measurement is achieved.
- b) All new Trade Waste installations must have a Trade Waste water meter fitted as a condition of development or building works approval.
- c) The Generator must demonstrate that it is not practical or equitable to install a meter.

Category 4 Trade Waste Generators shall install an approved Trade Waste flow meter calibrated as specified in the conditions of the Approval.

In the absence of an approved Trade Waste flow meter the volume of Trade Waste discharged shall be estimated from the total metered water consumption, less an allowance for domestic and allowance for water consumed on the property based on a discharge factor.

Previous investigations have established a basis for estimating the proportion of water consumption discharged as Trade Waste by various types of trade and manufacturing processes. These will form the basis of the initial factor applied when a Category 4 Approval is issued. Where there is no factor available, 100 percent discharge will be assumed.

Where an individual Trade Waste Generator has information that would accurately determine the actual percentage or volume of Trade Waste discharged, the Trade Waste Generator may apply to the Council for reconsideration of the factor used.

Trade Waste water meters are to be installed in an accessible position that poses no risk to the meter reader and at a height no greater than 1.8 metres from floor level. Any existing meters that are installed in positions that do not meet these requirements shall be relocated as directed by Trade Waste Compliance and at the Generator's expense. Council may require fitting of automated meter reading devices at the generators expense.

To ensure Council's measurements or estimations of Trade Waste discharge volumes are fair and equitable, particularly where there are multiple Trade Waste Generators on one property, each Generator must install a separate Trade Waste flow meter.

It is the responsibility of the Generator to inform Council when a Trade Waste flow meter or flow measuring device is fitted. If the meter is fitted part way through a financial year a combination of measurement and estimation will be used to determine the Trade Waste discharge volume.

Where a Trade Waste water meter is found to have been removed or damaged or is reading inaccurately or has ceased to register, the Generator must replace or repair this meter at their cost and at the direction of Council.

Should this meter affect the calculation of a discharge fee, the current reading will not be used. Instead, the fee will be calculated using the highest of any historic data (based over three years) relating to that meter or to an industry average based on prior history.

11.2 CATEGORY 5 TRADE WASTE

The volume of Trade Waste discharged shall be measured by an approved electro-

magnetic flow-measuring device installed and calibrated according to the manufacturer's specifications.

For new Trade Waste installations, the Trade Waste discharge line shall be separate from the domestic waste discharge line.

12. DETERMINATION OF DISCHARGE QUALITY

12.1 CATEGORY 1 TRADE WASTE

The quality of Category 1 Trade Waste discharged to a sewerage system is estimated to be of the quality specified in section 5 (Discharge Categories) for Category 1 Trade Waste.

Quality analyses of Category 1 Trade Waste discharges are required for compliance checks only. The quality analyses shall be performed by the Council as part of its inspection and monitoring program. The cost of the quality analyses shall be covered by the annual Trade Waste charge.

Where additional inspection and testing of Category 1 Trade Waste discharges is required because of non-compliance with a Trade Waste Approval the Council shall charge the holder of the Category 1 Approval in accordance with section 7.6 and Appendix C.

12.2 CATEGORY 2, 3, OR 4 TRADE WASTE

Quality analyses of Category 2, 3, or 4 Trade Waste discharges are required for compliance checks only. The quality analyses shall be performed by the Council as part of its inspection and monitoring program. The cost of the quality analyses shall be covered by the annual Trade Waste charge.

Where additional inspection and testing of Category 2, 3 or 4 Trade Waste discharges is required because of non-compliance discharge with a Trade Waste Approval the Council shall charge the holder of the Category 2, 3, or 4 Approval in accordance with section 7.6 and Appendix C.

12.3 CATEGORY 5 TRADE WASTE

12.3.1 Monitoring of Discharge by Council

Quality analyses for Category 5 Trade Waste are required for both charging and compliance purposes. All testing carried out for quality analysis is required to be conducted by a NATA accredited Laboratory.

Council may calculate discharge quality by collecting flow-weighted samples daily for a continuous seven (7) day period, at least once per quarter. These samples will be used to determine a statistical estimate of total load for each monitored parameter for the quarter. Alternatively council may utilise grab samples for this purpose.

If a Generator believes the results may not be representative of actual discharge, Council, at the expense of the Generator, may conduct a separate seven-day load survey.

Council reserves the right to use the original test results, or apply corrective factors to determine charges that are fair and equitable to both parties.

12.3.2 Self-Monitoring

A system of self-monitoring may enable Generators to collect sufficient data to enable the average mass load for the designated charging period to be calculated. All testing carried out for quality analysis is required to be conducted by a NATA accredited Laboratory.

Where pre-treatment is required to meet sewer admission standards 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 Approval.

The Generator must meet all cost associated with self-monitoring. Council, at its own expense may inspect premises and audit test results.

Where additional inspection and testing is undertaken by Council as a result of or relating to non-compliance, fees will be charged in accordance with section 7.6 and Appendix C.

13. SPECIFIC REQUIREMENTS FOR COMMERCIAL AND INDUSTRIAL WASTES

13.1 REMOVING REGULATED WASTE FROM PREMISES

Removal of regulated liquid wastes from Premises shall only be carried out by properly licensed waste transporters and transported, stored, treated or disposed of in accordance with the relevant environmental protection legislation.(see Appendix A).

No person shall discharge or cause to be discharged directly or indirectly to Council's sewerage system, trade wastes from any waste transport vehicle without the Council's approval through the issue of a Trade Water Approval.

Removing and disposing of septic tank waste, portable toilet waste and approved holding tank waste shall only be done by a licensed waste transporter. Such waste may be disposed of at Council's Sewage Treatment Plants in accordance with conditions determined by the Manager Water Operations.

Waste from commercial (non-domestic) grease and oil arrestors, silt and lint traps other than treated Trade Waste from installations approved under section 14.2 (arrestor installations), shall not be discharged to a sewerage system. Such wastes shall be disposed of in a manner or at a site approved in accordance with requirements of the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 2019* and the *Environmental Protection (Waste Management) Regulation 2000*.

All waste transporters shall comply with Council's waste tracking requirements to account for all waste collected and disposed of within the Council's local government area.

14. ARRESTOR INSTALLATIONS

14.1 GENERAL CONDITIONS

Where arrestors are required to pre-treat waste prior to discharge to a sewerage system, they must be of a design and capacity in accordance with Appendix D - Pre-treatment Guidelines for Trade Waste Discharges and or a certified Water Mark

accreditation.

Any departure from these requirements will be at the discretion of the Manager Water Services.

Banana Shire Council assessment process (for 'off the shelf' pre-treatment device) does not include an engineering assessment of the structural integrity of the pre-treatment device or its installation requirements. The structural integrity and effective installation of the pre-treatment device is the responsibility of the manufacture, the supplier and the installer of the pre-treatment device.

Maintenance cleaning of arrestors shall be carried out on a regular basis in accordance with conditions of the Trade Waste Approval & manufactures recommendations.

All pre-treatment equipment must be installed in a suitable location allowing inspection, servicing and maintenance to be carried out in a safe manner in accordance with Work Health and Safety requirements.

Where Council has approved a shared pre-treatment device to be installed for the treatment of waste, it will be the responsibility of the property owner or authorised agent to ensure that all Council requirements relating to the arranging of servicing, maintenance and repairs of the devices on behalf of the tenants/leaseholders are met as per the Trade Waste Approval. It will be at the property owner's/ authorised agent discretion to apportion any associated costs to their tenants, or leaseholders when undertaking any of these requirements.

In a situation where a grease arrestor is required for pre-treatment but cannot be installed because of specific site constraints an equivalent arrestor charge in accordance with section 7.5 will apply.

Where a Trade Waste process or processes cease to operate and the Generator seeks to cancel the Trade Waste Approval, an arrestor must be disconnected from Council's sewerage system in accordance with the *Plumbing and Drainage Act 2018*

14.2 GREASE ARRESTORS

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

- a) Appendix D Table 2 of this management plan
- b) *Plumbing and Drainage Act 2018*
- c) *Plumbing and Drainage Regulation 2019*

The Generator is responsible to ensure that the grease arrestor trap is maintained in an operable condition and has the correct hydraulic capacity to cope with contaminants present in the Trade Waste stream.

The correct operating capacity of a grease arrestor trap installed in commercial premises is calculated by adding the load from either each fixture or fitting, which will be discharging trade waste to the Council sewer via the grease arrestor trap, or the rated seating capacity, whichever is the greater. Refer Appendix D for guidance.

The capacity of grease arrestor traps must be approved by Council. Conditions include:

- a) The minimum capacity of an individual grease arrestor trap must be 550 litres.

- b) The maximum capacity of an individual grease arrestor trap must be 5000 litres.

The quantity of Trade Waste discharging to a grease arrestor trap with a capacity greater than 2,000 litres must at the time of installation exceed 75 per cent of the arrestor trap maximum capacity. For example, for a 5,000 litre arrestor trap 75 per cent equals 3,750 litres. To calculate the necessary capacity of a grease arrestor trap specifically for a commercial retail food operation refer to Appendix D.

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

- a) the size of the grease arrestor;
- b) details of the loading and total fixture rating to be discharged by each Trade Waste Generator;
- c) the names of the businesses and shop numbers sharing the grease arrestor; and
- d) the total seating capacity for all businesses sharing the grease arrestor.

A hose cock with suitable backflow prevention is to be provided within 10 metres of the arrestor to assist cleaning during the servicing of the pre-treatment device.

The location must be approved by Council **prior** to installation and shall be situated so as to prevent the entry of stormwater or surface water, with the surrounding surface graded away from the arrestor.

All grease arrestors shall be fitted with appropriate sized openings for maintenance, gas-tight covers and frames, and be fitted with 100mm induct and educt vents.

Maintenance cleaning of grease arrestors shall be carried out on a regular basis in accordance with conditions of the Trade Waste Approval by a waste transporter licensed under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 2019*.

Remote servicing pipes - pump out lines should only be used where the arrestor cannot be located in an accessible location and must comply with the following:

- a) must be 80mm diameter
- b) changes of direction and junctions must include 'sweep' type bends i.e. elbows and tees must not be used.
- c) inlet (grease arrestor end) of pipe should terminate with a lockable 80mm ball-valve and an 80mm camlock fitting, 900mm above the floor as close as practicable to the arrestor.
- d) suction (truck) end should be located in an easily accessible position and terminate with an 80mm male cam lock fitting and cap.

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

- a) the minimum clear height above the top of the arrestor lids and the underside of the slab, or concrete thickening beam or any other obstruction should be 1500 millimetres minimum for gastight screw on light duty lids and 1800 millimetres minimum for gastight covers and frame
- b) 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 2100 millimetres clear of the underside of the floor slab, or concrete thickening beam or any other department.

If the arrestor's approval includes a filter, a spare filter must be supplied with the unit. Filters must be replaced with a clean, decontaminated filter as per servicing schedule. The filter removed from arrestor must be transported off-site for decontamination and cleaning.

Any plumbing or drainage work at the premise must be carried out by a licensed plumber and be verified by a compliance certificate issued by the Council's Plumbing and Drainage section.

14.3 MINERAL OIL ARRESTORS

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

- a) coalescing plate or vertical tube separators;
- b) membrane technology;
- c) dissolved air flotation (DAF);
- d) chemical precipitation;
- e) hydrocyclones; and
- f) other apparatus or methods approved by Council.

Should any previously approved, existing apparatus fail to comply with the required discharge limits as specified in this policy, the discharge may be required to cease immediately and be disconnected from the sewerage system until either effective remedial work has been carried out on the device, or the device upgraded or replaced.

The waste generated by washing soiled hands as a direct result of normal business activities shall be deemed as a trade waste discharge. Consequently, the Tenant/Leaseholder or Trade Waste Generator shall obtain a Trade Waste Approval. Council may direct the Trade Waste Generator to connect the waste to a pre-treatment device.

A pre-treatment device will be required to treat the waste discharged to sewer from any field gully trap or pit, where there is a hose cock located above such discharge point.

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

Subject to recommendations by the manufacturers of plate/vertical tube separators, "Quick Break Detergents" must be used with plate/tube separation units.

14.4 OTHER ARRESTOR APPLICATIONS

Arrestor installations may be used for other trade waste treatment applications such as:

- a) silt separation;

- b) oil and grease (non petroleum);
- c) cooling;
- d) neutralisation; and
- e) 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 the site location.

15. ENZYMES AND MUTANT BACTERIA IN PRETREATMENT

15.1 ENZYMES AND MUTANT BACTERIA

The use of enzymes and mutant or natural bacterial cultures in certain biological pre-treatment systems is prohibited unless specifically approved by the Council. Conditional approval may be given to allow a Trade Waste Generator to demonstrate to the Council that the product to be used does not adversely impact on sewerage systems or the environment.

Any such demonstrations are to be totally at the expense of the Trade Waste Generator, including any inspection and testing by Council. Council is under no obligation to approve such additives.

15.2 GENETICALLY MODIFIED ORGANISMS (GMO'S)

The use of genetically modified organisms (GMO's) is regulated under the *Gene Technology Act 2000* (Commonwealth legislation) and *Gene Technology Act 2016* (Queensland legislation).

A Generator wishing to discharge Trade Waste or commercial products containing genetically modified organisms to a sewerage system shall first obtain approval from the Gene Technology Regulator, Canberra for the release of organisms. If approval for the release is granted from the Gene Technology Regulator, the Council may then grant approval for discharge of the products to a sewerage system.

Laboratories and other facilities which culture, package or transport genetically modified organisms shall have in place sufficient procedures and pre-treatment equipment to ensure that no live genetically modified organisms are discharged to a sewerage system.

16. WASTE DISPOSAL UNITS

16.1 FOOD WASTE DISPOSAL UNITS

Food waste disposal units (garbage grinders/sink-to-sewer disposal units) may be approved for non-domestic use by specific application to Council. Charges are reviewed annually by Council.

Food waste disposal units should be plumbed around a grease arrestor (where installed).

The installation of food waste disposal units is discouraged as they place an unnecessary biological load on Council's sewerage infrastructure.

16.2 MACERATOR UNITS

Wastes from macerator units that are used to dispose of single-use hospital items such as bed pans made of cellulosic materials may not be discharged to Council's sewerage system without approval from Council's Water Services Section through the issuing of an Approval. Applicants for the installation of the bed pan macerators must demonstrate there will be no impact from the cellulosic material on the sewerage system. Where a problem arises with the discharge of such

waste to Council's sewerage system Council may require that discharge of the waste generated from such apparatus cease immediately, the device be removed from service and Trade Waste Approval amended accordingly or cancelled.

17. COMMERCIAL SWIMMING POOLS / ORNAMENTAL PONDS

The backwash water and pool water from commercial and public swimming pools and ornamental ponds constitutes a trade waste and may not be discharged to sewer without approval through the issue of a Trade Waste Approval.

18. MEDICAL, CLINICAL, VETERINARY AND INFECTIOUS WASTES

Clinical and related waste should be managed in accordance with the requirements of the *Waste Reduction and Recycling Regulation 2011*

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 tissue, must **not** be discharged to a sewerage system.

Clinical wastes such as:

- a) laboratory and associated wastes involved in specimen processing;
 - b) human tissues, including materials or solutions that contain free-flowing or expressible blood; and
 - c) Infectious or other liquid waste that has the potential to cause public offence
- must **not** be discharged into the sewer without approval.

Clinical waste that has undergone pre-treatment to render it non-infectious/non-hazardous or has been risk assessed and approved in writing by both Queensland Health and Banana Shire Council as safe for sewer disposal may be approved for discharge and if approved trade waste charges will apply. Approval holders must comply with Queensland waste disposal regulations applicable to clinical waste, including the *Waste Reduction and Recycling Regulation 2011*.

Any discharge of liquid waste 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 must be in accordance with National Health and Medical Research Council and Queensland Health requirements.

Aqueous pathological wastes must be stored, handled and disposed according to any relevant guidelines adopted by the National Health and Medical Research Council and Queensland Health.

Mercury is widely used in the preparation of restorative teeth amalgams. Dental amalgam waste contains mercury and, although designated as clinical waste, must not be discharged into Council's sewerage infrastructure.

The trade waste acceptance standard for mercury is very low. Therefore, in general terms, mercury and anything containing mercury should not be discharged into Council's sewerage infrastructure. Approval holders must comply with Queensland waste disposal regulations applicable to mercury and anything containing mercury, including the *Waste Reduction and Recycling Regulation 2011*.

In accordance with ISO/CD 11 143, dental practitioners should install amalgam separators to remove mercury from trade waste streams containing amalgam residues. This includes cuspidor waste collected from dental chairs. Residual amalgam waste should be stored under radiographic fixer until collected by a licensed waste disposal contractor.

19. CONTAINMENT OF TOXIC AND 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 or mechanical means to a sewerage system.

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

20. DISCHARGE OF LIQUID WASTES FROM VEHICLES

The discharge of toilet waste from buses, or recreational vehicles may be permitted at approved discharge locations such as bus or transport depots, terminals, and caravan parks. The operator of the premises on which such facilities are located must hold a Trade Waste Approval for discharge of such waste to a sewerage system, and discharge must be in accordance with the Trade Waste Approval conditions.

The Owner of such Premises shall be deemed to be a Category 1 Trade Waste Generator. Charges will apply in accordance with Section 7.3 Discharge volume shall be agreed on an individual basis.

21. LANDFILL LEACHATE AND WASTEWATER FROM DISPOSAL FACILITIES

Leachate from landfill sites and wastewater from waste treatment disposal facilities constitutes Trade Waste and may not be discharged to a sewerage system without permission from Manager Water Services.

Council shall determine the category of the waste generated with reference to the quantity and characteristics of the Trade Waste or leachate. Liquid waste disposal fees shall apply for the disposal of this Trade Waste.

22. SPECIFICATIONS FOR PRE-TREATMENT DEVICES

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

Unless otherwise approved, all arrestors shall:

- a) not be less than 550 litres in capacity;
- b) not be greater than 5000 litres in capacity;
- c) be vented with a 100 mm diameter vent;
- d) have gas-tight lids;
- e) be fitted with sample points with 100 mm diameter access covers on the inlet and outlet of the arrestor;
- f) have a capacity below the invert of the outlet of the arrestor outlet at least twice the total capacity of the appliances and fixtures connected to the arrestor or, a larger capacity if required by the Council;

- g) have a distance from the top of the arrestor to the outlet that is at least half the depth of the arrestor below the outlet invert; and
- h) have the outlet invert level of the arrestor at least 75 mm below the inlet invert level.

22.1 GAS-TIGHT COVERS AND FRAMES

Where interceptor traps have removable and replaceable baffles, the gas-tight frame shall be the full length and full width of the trap opening. It should be placed on the thickening rib of the interceptor trap or vertical extension of the interceptor trap wall and flush with the inside of the vertical concrete wall extension or thickening rib of the interceptor.

Where interceptor traps do not have replaceable or removable baffles, and it can be demonstrated that the baffle material construction and service life is equal to the surrounding trap structure, a pre-cast concrete surround incorporating multi-part gas-tight covers and frame having a width of no less than 900 mm and a length, which allows access to all interceptor trap compartments may be installed.

23. DISCHARGE FROM OPEN AREAS

The direct discharge of rainwater and stormwater to sewer is prohibited.

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

A Trade Waste Approval is required to discharge surface water from a potentially contaminated open area.

Applicants should note that a Trade Waste Approval to discharge from an open area 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.

All applications for discharge into a sewerage system from open areas must have controls incorporated in the design that will, in the opinion of Council, ensure that the discharge quality of the wash down trade waste meets the requirements set by this policy. These shall include that:

- a) An authorised back-flow prevention device to be installed upstream of any demand-driven stormwater diversion valve as approved by Council's Plumbing Inspector and in accordance with *Australian Standard 3500 Part 1* and *Australian Standard 2845.3*;
- b) all contaminated liquid waste is pumped to a sewerage system at a rate acceptable to Council;
- c) all discharge to sewerage system ceases automatically after a predetermined level of rainfall volume (mm) and/or intensity (mm/hr) to be set by Council;
- d) the "first flush" volume is collected and segregated during wet weather with additional runoff directed to the stormwater drainage;
- e) the "first flush" volume collected is pumped to a sewerage system, after any necessary pre-treatment, no sooner than one (1) hour after the rain stops; and

- f) a suitable device to determine the flow and volume of the discharge to a sewerage system is installed.

Applicants should seek advice from Council on the required “first flush” volume to be collected.

If the discharge of surface water from a potentially contaminated open area is approved for discharge to a sewerage system, Trade Waste Charges and Trade Waste Fees shall apply.

24. DISCRETIONARY POWER

Notwithstanding the provisions of this *Plan*, given the complexity of many industrial wastes and the need to protect sewerage systems, staff and the environment, acceptance of any Trade Waste to a sewerage system shall always be at the discretion of the Council.

25. FORCE MAJEURE

If at any time the ability of the Council to accept Trade Waste to a sewerage system is interfered with or prevented directly or indirectly due to force majeure, the Council may suspend the Approval to discharge Trade Waste under Trade Waste Approvals either wholly or partly for the period of such inability without any liability to the Owner or Trade Waste Generator whatsoever for any losses or damage suffered or incurred by the Owner or Trade Waste Generator whatsoever.

26. IMPLEMENTATION

This Trade Waste Plan is effective from 1 December 2020.

APPENDIX A

RELEVANT STATE OF QUEENSLAND LEGISLATION

Environmental Protection Act 1994 Environmental Protection Regulation 2019

Waste Reduction and Recycling Regulation 2011

Gene Technology Act 2001 (Queensland legislation) Local

Government Act 2009

Planning Act 2016

Plumbing and Drainage Act 2018

Plumbing and Drainage Regulation 2019

Water Act 2000

Water Supply (Safety and Reliability) Act 2008

OTHER RELEVANT LEGISLATION

Gene Technology Act 2000 (Commonwealth legislation) Radiation

Safety Act 1999

Radiation Safety Regulation 2010

APPENDIX B

SEWER ADMISSION LIMITS

The sewer admission limits for the quality of Trade Waste discharged to a sewerage system for all categories are set out below. These admission limits shall apply from 1 July 2020. They are subject to periodic review.

Schedule I. GENERAL LIMITS

<u>Parameter</u>	<u>Concentration, mg/L except *</u>
Temperature*	< 38°C
pH *	6 – 10
Biochemical Oxygen Demand (BOD ₅) #	750
Chemical Oxygen Demand (COD) #	1,500
Total Organic Carbon (TOC) #	1,000
Suspended Solids #	500
Total dissolved solids (TDS) #	1,500
Total oil/grease (Hexane)	200
Gross solids *	Non-faecal gross solids shall have a maximum linear dimension of less than 20mm and a quiescent settling rate of less than 3m/hr.
Colour *	Limited such as not to give any discernible colour in treatment works discharge.
Odour *	Not detectable in 1% dilution or causing an odour problem in Council's sewerage system.
Chlorine (as Cl ₂)	10
Sulphate (as SO ₄) #	1000
Sulphite (as SO ₃)	15
Surfactants - Anionic (MBAS)	100
Aluminium (as Al) #	100
Iron (as Fe) #	10
Ammonia plus ammonium ion (as N) #	50
Total Kjeldahl Nitrogen (as N) #	100
Total Phosphorus (as P) #	15
Manganese (as Mn)	10

The total mass load and the capacity of a sewerage system to accept the load shall be considered for each application.

The Council may in some circumstances accept waste containing higher values of these parameters. Additional charges for treatment shall apply.

Schedule II. PROHIBITED DISCHARGES

Prohibited substances are substances that are dangerous to people, infrastructure and the environment, as defined in Schedule 1 of the *Water Supply (Safety and Reliability) Act 2008*.

Prohibited substances must never be discharged to sewer. If you are found to be discharging any prohibited substance to sewer, penalties will apply.

The following are prohibited discharges:

- a) Substances referred to in schedule 1 of the *Water Supply (Safety and Reliability) Act 2008*.
- b) Flammable/explosive substances; and
- c) Solid or viscous substances in a quality, or of a size, than can obstruct the operation of Council's sewerage system. Examples include but not limited to: concrete or concrete tailings metal, glass, plastic, rags, ash, cinders, straw, tar, wood, grease, oil and
- d) Radioactive substances except as allowed for under the *Radiation Safety Act 1999* and the *Radiation Safety Regulation 2010*; and
- e) Pathological and infectious waste and cytotoxic waste except as allowed for under the National Industry Code of Practice for the Management of Clinical and Related Wastes; and
- f) Genetically modified (engineered) organisms; and
- g) Floodwater, rainwater, roof water, stormwater, subsoil water, surface water and uncontaminated water.

Schedule III. SPECIFIC LIMITS – INORGANIC

Parameter	Concentration, mg/L
Boron (B)	5
Bromine (Br ₂)	5
Fluoride (F)	30
Ferrocyanide (Fe(CN) ₆)	50
Sulphide (S)	1

Schedule IV. SPECIFIC LIMITS – METALS

Parameter		Concentration mg/L	Mass Load
Arsenic		1	3
Barium		5	
Cadmium		1	6
Chromium	Total	3	10
	Hexavalent	1.5	
Cobalt		5	15
Cooper		5	50
Lead (Pb)		1	3
Mercury		0.01	0.03
Nickel (Ni)		1	3
Selenium		1	3
Silver (Ag)		5	5
Tin (Sn)		5	15
Zinc (Zn)		1	10

* Where hexavalent (Cr^{6+}) is present in the process water, pre-treatment will be required to reduce it to the trivalent state (Cr^{3+}), prior to discharge into the sewer. Discharge of hexavalent chromium (Cr^{6+}) from chromate compounds used as corrosion inhibitors in cooling towers is not permitted.

Schedule V. SPECIFIC LIMITS - ORGANIC

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

Parameter	Maximum Concentration on mg/L
Formaldehyde (HCHO)	30
Phenolic compounds (as Phenol)	1
Pentachlorophenol	5
Petroleum hydrocarbons	30
Halogenated Aliphatic hydrocarbons	5
Halogenated Aromatic Hydrocarbons (HAHs)	0.002
Polychlorinated biphenyls (PCBs)	0.001
Polybrominated biphenyls (PBBs)	0.001
Polynuclear Aromatic Hydrocarbons (PAHs)	5
Pesticides: General (insecticides/herbicides/fungicides)**	1.0
Pesticides: Organophosphates (including but not limited to)	0.1
Azinphos-methyl	
Bromophos-ethyl	
Carbophenothion	
Chlorfenvinphos	
Chlorpyrifos	
Chlorpyrifos-methyl	
Demeton-S-methyl	
Diazinon	
Dichlorvos	
Dimethoate	
Ethion	
Fenamiphos	
Fenthion	
Malathion	
Monocrotophos	
Parathion	
Parathion-Methyl	
Prothiophos	
Pyrimphos-ethyl	
Pesticides-Organochlorines (including but not limited to)	
4,4'-DDD	0.0005
4,4'-DDE	0.0005
4,4'-DDT	0.0020
Aldrin	0.0005
Alpha-BHC	0.0005
alpha-Endosulfan	0.0005
beta-BHC	0.0005
beta-Endosulfan	0.0005
Chlordane-cis	0.0005
Chlordane-trans	0.0005
delta-BHC	0.0005
Dieldrin	0.0005

Endosulfan sulphate	0.0005
Endrin	0.0005
Endrin aldehyde	0.0005
Endrin ketone	0.0005
Gamma-BHC	0.0005
HCB	0.0005
Heptachlor	0.0005
Heptachlor expoxide	0.0005
Methoxychlor	0.0020

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

Schedule VI.

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

APPENDIX C

TRADE WASTE CHARGES AND FEES

Trade Waste charges and fees are reviewed annually and published in Council's fees & charges.

APPENDIX D

PRE-TREATMENT REQUIREMENTS FOR TRADE WASTE DISCHARGES

The tables below are indicative only.

General Requirements

Generator/Source	Characteristics of Waste	General Treatment Requirements
Automotive/Engineering Industries		
Car wash areas – commercial - open areas - roofed and bunded	Oil, grease, solids, rain Oil, grease, solids	Demand driven diversion valve, oil arrestor*, rainwater controls, flow measurement Oil arrestor*, quick-break detergents must be used
Car wash areas – residential - open areas - roofed and bunded (to prevent Stormwater ingress)	Oil, grease, solids, rain Oil, grease, solids	Silt trap, 550L min capacity and demand driven diversion valve and rainwater diversion Silt trap, 550L minimum capacity
Detailing	Grease, oil, solids, detergents	Oil arrestor*
Engine/gear box reconditioning (small operation)	Lead, grease, kerosene, solids, detergent	Oil arrestor*
Equipment hire company	Oil, grease, kerosene, solids, detergent	Oil arrestor*
Lawn mower repairs	Oil, grease, grass, solids, detergents	Oil arrestor*
Mechanical workshop	Oil, grease, kerosene, solids, detergents	Oil arrestor*
Panel beating/spray painting	Suspended solids, oil, grease	General purpose pit, oil arrestor*
Radiator repair (small operation)	Suspended solids, pH, toxic metals	pH adjustment prior to solid settlement and pH adjustment before discharge to sewer; may require oil separation and metal precipitate removal
Service stations – workshop only - covered forecourt	Oil and grease Oil and grease	Oil arrestor* New development no discharge
Wreckers	Oil, grease, solids	Oil arrestor*

Sewer connections to fuel dispensing areas, flammable and dangerous goods stores will not be permitted. A 10,000 litre holding tank not connected to the sewerage systems complete with high level alarm is a cost effective option.

Where there is an existing Trade Waste Approval for discharge collected from the forecourt and fuel filling areas, Council may, at its discretion, continue to permit the discharge. However Council may require the Owner/Operator to submit for approval an Environmental Management Plan which outlines proposed upgrade measures and time-lines to disconnect from the sewer.

***Note 1 - Oil Arrestor Requirements**

Where any oil arrestors of the coalescing plate oil arrestors (CPOA) type are proposed to be used, the Generator should identify the type of waste and estimated quantity in discussions with the various suppliers and/ or consultants and obtain their assurance as to the suitability of their particular unit to comply with Council’s Sewer Admission Standards prior to installation. Generally, triple baffle type arrestors are to be used only for car wash down situations.

As a general guideline, an oil arrestor trap is required with capacity being the greater of –

- Sufficient capacity to provide a retention time of one (1) hour at peak flow, or
- 550 litres.

Coalescing plate separators are to be used in conjunction with a suitable sized silt trap.

Quick-break detergents must be used for all wastewater discharging to the sewer via a CPOA. These are special detergents used for cleaning by emulsifying oils and grease then quickly breaking the emulsion formed in less than 15 mins to allow separation of the oil from the water.

Generator/Source	Characteristics of Waste	General Treatment Requirements
Commercial Food Outlets		
Bakery-Hot bread, pies cakes, pastries	Flour products, grease	In-floor dry basket arrestors in food preparation and handling areas; grease arrestor** (See Table 2) (i) (iii)
Bistro	Grease/oil	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Butcher, small, retail	Grease (washing floors and utensils)	In-floor and under-sink dry basket arrestors in meat preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Canteen/cafeteria (with hot food preparation)	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Caterer	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Chicken (fresh), retail, meat cutting and preparation	Grease	In-floor and under-sink dry basket arrestors in meat preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Coffee shop, hot food prepared and served	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Commercial kitchen	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Community halls (food preparation)	Grease	Grease arrestor**
Fish (fresh) - no cooking	Scales, fish gut	In-floor and under-sink dry basket arrestors in fish preparation and wash-up areas. (i) (ii) (iii)
Fish shop retail and cooking on site	Scales, grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)

Generator/Source	Characteristics of Waste	General Treatment Requirements
Hospital kitchen	Grease and oil, high temperatures	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii) , capacity to cool hot discharge water to less than 38°C.
Hotel with counter lunches/restaurants	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** Glass washers in bars to by-pass grease arrestors (i) (ii) (iii)
Ice cream parlour – with hot food, take-away	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Large take-away food outlets eg McDonald's, Pizza Hut, Kentucky Fried, BBQ and Charcoal Chicken, (Convothem-ovens), rotisseries etc	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Motel with kitchens/restaurants	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Nursing homes/kitchen	Grease/solids	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Restaurant	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Sandwich bar with hot food take-away	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Sandwich/coffee shop - no hot foods prepared	Grease	Subject to condition. No preparation or cooking.
Shopping centres–preparation	Grease and solids	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Supermarkets – incorporating butcher and/or bakery	Grease and flour	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)
Take-away food outlets	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor** (i) (ii) (iii)

** **Note 2** – See Table 2 for guidelines for sizing of grease arrestors

- (i) Bucket trap with removable strainer for cleaning, fixed secondary strainer or self-closing or self-sealing valve.
- (ii) Under sink strainer device.
- (iii) Cleaners sink.

Generator/Source	Characteristics of Waste	General Treatment Requirements
Other Commercial/Service Industries		
Bowls/Sporting Clubs	Grease	In-floor and under-sink dry basket arrestors in food preparation and wash-up areas; grease arrestor
Dental/medical/veterinary surgeries - no plaster casts - plaster casts - X-rays	Solids Solids Rinse water and spent solutions	Bottle trap Plaster arrestor To sewer after silver recovery or collect fixer for recycle.
Fruit/vegetables peelers	Solids	Screening.
Garbage bin cleaning	Grease/solids	Bucket trap over floor waste; if grease arrestor installed waste to pass via arrestor
Hairdressing salon	No threat	Screening at sink and floor waste. Cleaners sink
Hobby clubs - <200L/day - 200 –1,000 L/day - >1,000 L/day	Suspended solids Suspended solids Suspended solids	At discretion of Trade Waste Officer Dry Basket Arrestor Plaster arrestor 550 or under sink Solids settlement pit, 1,000 L, min of 1 hour retention
Kennels	Solids	Dry arrestor pit; open area controls
Laundromat	Lint, temperature	Lint screens 3mm mesh; cooling pit if temperature >38°C (washing machine internal screens acceptable)
Optician (<200 l/day)	Suspended solids	Bottle trap under sink
Photographic waste - fast photo - X-rays	Rinse water and spent solutions Rinse water and spent solutions	To sewer after silver recovery or collect fixer for recycle To sewer after silver recovery
School – - home science, tuck shops (hot food) - laboratory	Grease Acid/alkali, chemicals	Grease arrestor** Sediment and neutralising trap**

Table 2 - Grease Arrestor Requirements

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

Fixture/Fitting	Capacity (Litres)
Basin - hand	30
Bowl – Mixing	
- small – 350 dia	100
- large	200
Bucket Trap	50
Dishwasher	
- small (bench)	400
- medium (upright)	800
- large (2 outlets)	1200
Grease canopy	50
Glass washers (not in liquor sales area)	200
Mixing bowl and noodle cooker	140
Sink	
– cleaners	30
– domestic	50
– commercial Kitchen single	150
– commercial Kitchen double or pot	300
– lab – education facility	22
– lab – commercial or research	50
Steamer cooker/kettle	200
Steamer/hydrotherm/boiling pots/stock pots	100
Steam Roasting Convection Ovens (Convotherm-ovens)	
- 10 or less trays	400
->10 but <20 trays	800
- >20 trays	1200
Tundish – condensate (refrigerator/freezer)	3
Water heated bain-marie	40
Wok burner	150

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

Servicing Capacity	Minimum Grease arrestor Size
0-40 persons	550 L
40-90 persons	1000 L
90-180 persons	2000 L

APPENDIX E

TRADE WASTE GENERATOR CATEGORIES

Examples of Category 1 Generators

Category 1 includes, but is not limited to, the following:

- Air-conditioner wastes – condensates, cooling tower wastes
- Commercial refrigeration condensates
- Hairdressers
- Hobby clubs
- Medical surgeries (including dental, veterinary, chiropractic – where X-Rays are used)
- Photographic/X-Ray/graphic arts/mini labs
- School arts
- Spas commercial

Examples of Category 2 Generators

Category 2 includes, but is not limited to, the following:

- Automotive related businesses
- Car washes (small scale)
- Service stations
- Small engineering works
- Small plant repairs

Examples of Category 3 Generators

Category 3 includes, but is not limited to, the following:

- Bakers/hot bread shops
- Bowls/Sporting Clubs
- Butchers
- Child care centres with food, craft, laundry etc
- Clubs
- Delicatessens
- Fast food outlets/take away
- Garbage collection areas and compactors in commercial buildings
- Hospitals
- Hotels
- Ice cream parlours
- Motels
- Nursing homes
- Pie/pastry outlets
- Restaurants, coffee shops, cafes
- Seafood shops
- Supermarket/shopping centres

Examples of Category 4 Generators

A category 4 includes, but are not limited to, the following:

- Laundries
- Laundromats
- Car wash depots
- Swimming pool backwash water

Examples of Category 5 Generators

Major manufacturing and industrial processing industries include, but are not limited to, the following:

- Any activity in categories (a), (b), (c) or (d) carried out on a large scale > 15KL/day
- Abattoirs – meat/poultry
- Asphalt/bitumen production
- Breweries
- Cement production
- Chemical and related industries
- Chemical manufacturing – general (organic and inorganic)
- Chlor-alkali manufacture
- Confectionery manufacturing
- Dairies
- Electronics
- Electroplaters/galvanizers
- Explosives production
- Fabrication and powder coating
- Fermentation/yeast
- Fertilizer production
- Fibreglass production
- Food/beverage industries
- Foundries
- Fruit/vegetable processing (canning, freezing, juicing)
- Glass/ceramic manufacturing
- Grain milling
- Laboratories – scientific and pathology
- Large scale baking (bread, biscuits, pastries etc)
- Meat processing/small goods manufacturing
- Metal finishing
- Metal processing
- Mining/minerals industries
- Oil seed/oil extraction
- Paints/varnishes/lacquers production
- Paper and cardboard processing/manufacturing
- Pesticides/herbicides production
- Petroleum refining
- Pharmaceuticals/cosmetic production
- Plastic production or manufacture
- Power generation
- Printing/publications/graphic arts/photographic (large scale)
- Recyclers
- Rendering
- Repacking activities
- Resins, adhesives/latex production
- Rubber – natural/synthetic production
- Seafood production
- Smelting/refining
- Soap, detergent and associate product manufacturing
- Soft drink/cordial manufacturing
- Starch production
- Storage areas warehouses/industrial/commercial
- Sugar production
- Tanneries
- Textiles (wood, cotton, synthetics)
- Timber preservation
- Veneer/plywood manufacture
- Waste oil refining
- Wineries/distillers
- Wool scouring