CODE OF PRACTICE

LIQUID TRADE WASTE DISCHARGE TO THE SEWERAGE SYSTEM

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DOCUMENT CONTROL

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REASON FOR CODE

The purpose of this Code of Practice is to ensure that discharges of Liquid Trade Waste to the sewerage system meet best practice environmental and health performance standards and ensure efficient operation management of sewerage systems.

INTRODUCTION

Warren Shire Council developed its Discharge of Liquid Trade Waste to the Sewerage System Code of Practice in 2017 in accordance with the *NSW Framework for Regulation of Sewerage and Trade Waste*. The aim of this Code of Practice is to offer guidance in preparing applications to Council for approval; the regulation requirements for discharge into the sewer clarify what is required and how to apply the various related documents.

As the definition of Liquid Trade Waste now includes septic tank Waste, chemical toilet Waste, Waste from marine pump-out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system, these types of Waste will now be included in this policy. This policy now applies to the management of such Wastes. Accordingly, specific references to these Wastes are provided in this policy where necessary.

Code of Practice

Details: The Code covers the following:

Appendices:

1.0 ACKNOWLEDGEMENTS

Warren Shire Council acknowledges the assistance into the development of this Code of Practice from DoI Water.

2.0 TITLE

2.1 The title of this Code of Practice is Warren Shire Council Discharge of Liquid Trade Waste to the Sewerage System.

2.2 This Code of Practice consists of a written statement with accompanying diagrams where necessary to enhance comprehension.

2.3 This Code of Practice will come into force on 10 September 2017.

3.0 PURPOSE

The Warren Shire acknowledges the importance that water plays in the area, for recreation, industry, tourism as well as for basic needs. Residents of the shire enjoy a healthy lifestyle and environment and a desire to retain that amenity. Warren Shire Council may accept Liquid Trade Waste into its sewerage system as a service to businesses and industry. However, Liquid Trade Wastes may exert much greater demands on sewerage systems as they are generally designed to cater for domestic sources and, if uncontrolled, can pose serious problems to public health, worker safety, Council's sewerage system and the environment.

Impacts of poor Liquid Trade Waste regulation include:

- Grease, oil, solid material, if not removed on-site, can cause sewer chokes and blockages and the discharge of untreated sewerage to the environment.
- Strong Waste may cause sewerage odour problems and corrosion of sewer mains, pumping stations and sewerage treatment works.

The purpose of this Code of Practice is to ensure that all discharges into the sewerage system are properly controlled and regulated to reduce the demands on sewerage systems and sets out how council will regulate sewerage and Trade Waste discharges to its sewerage system in accordance with the NSW Framework for Regulation of Sewerage and Trade Waste.

The code is concerned with the approval, monitoring and enforcement process for Liquid Trade Wastes discharged to Council's sewerage system and the levying of commercial sewerage and Liquid Trade Waste fees and charges. It has been developed to ensure the proper control of Liquid Trade Waste and hence protection of public health, worker safety, the environment and Council's sewerage systems.

This code aims to:

- promote waste minimisation, water conservation, water recycling and bio-solids reuse
- protect public health, and the health and safety of Council employees
- protect the environment from discharge of Waste that may have a detrimental effect protect Council assets from damage
- assist Council to meet its statutory obligations
- provide environmentally responsible Liquid Trade Waste service to non-residential sectors

- encourage Waste minimisation and cleaner production in commercial and industrial sectors
- ensure compliance of Liquid Trade Waste dischargers with Council's approved conditions
- provide operational data on the volume and composition of industrial and commercial effluent to assist in the operation of the sewerage system and the design of augmentations or new sewerage systems
- ensure commercial provision of services and full cost recovery through appropriate sewerage and Liquid Trade Waste fees and charge

4.0 LAND TO WHICH THIS CODE OF PRACTICE APPLIES

4.1 This Code of Practice applies to all land within the Warren Shire Council Local Government Area with the exception of National Parks as outlined in the Department of Local Government Circular 99/59.

5.0 LEGISLATION AND RELATIONSHIP TO OTHER DOCUMENTS

5.1 A person wishing to discharge Liquid Trade Waste to the sewerage system must, under section 68 of the Local Government Act 1993 obtain prior approval from council. The procedure for approval is governed by Chapter 7 of the Act and is subject to the Local Government Regulation 2005. Discharging Liquid Trade Waste without an approval is an offence under section 626 of the Act.

5.2 Under clause 28 of the Regulation, a council must not grant an approval under section 68 of the Act to discharge Trade Waste (whether treated or not) into a sewer of the council unless the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS) has concurred with the approval. Under section 90 (2) of the Local Government Act, the Director-General, DTIRIS, may give the council notice that the concurrence may be assumed.

5.3 This code of practice is to be read in-conjunction with the latest available editions or revisions of:

- *The Local Government Act 1993 and Local Government (General) Regulation 2005;*
- *Australian Sewerage Quality Management Guidelines (2012).*
- *Liquid Trade Waste Regulation Guidelines (2009).*
- *Environmental Planning and Assessment Act 1979; Environmental Planning and Assessment Regulation 2000;*
- *Water Management Act 2000;*
- *Environmentally Hazardous Chemicals Act 1985*
- *Plumbing Code of Australia.*
- *AS/ NZS 3500, Part2, Sanitary Plumbing and Sanitary Drainage.*

6.0 APPLICATION

Liquid Trade Waste is defined in the Local Government (General) Regulation 2005 as:
"*all Liquid Waste other than sewerage of a domestic nature.*"

Liquid Trade Waste discharges to the sewerage system include Liquid Wastes from:

- Business / commercial premises (e.g. beautician, florist, hairdresser, hotel, motel, restaurant, butcher, service station, supermarket, dentist).
- Community / public premises (including craft club, school, college, university, hospital and nursing home).
- industrial premises
- Trade activities (e.g. mobile carpet cleaner).
- any commercial activities carried out at a residential premises
- saleyards, racecourses and from stables and kennels that are not associated with domestic households
- septic tank waste, chemical toilet waste, waste from marine pump-out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system.

As the definition of Liquid Trade Waste applies to septic tank waste, chemical toilet waste, waste from marine pump-out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system Council's policy for '*The acceptance of septic tank and pan wastes to the sewerage system'* has been repealed and this policy applies to the management of such wastes. Accordingly, specific references to these wastes are provided in this policy where necessary.

Liquid Trade Waste excludes:

- toilet, hand wash basin*, shower and bath wastes derived from all the premises and activities mentioned above (*used for personal hygiene only)
- Wastewater from residential toilets, kitchens, bathrooms or laundries (i.e. domestic sewerage)
- common use (non-residential) kitchen and laundry facilities in a caravan park residential swimming pool backwash.

7.0 EXEMPTIONS

The Director-General DTIRIS has consented to an exemption from the requirement to apply for approval for Liquid Trade Waste discharge to the sewerage system for certain commercial business activities (see Appendix 1). Each such business must meet the standard requirements specified. An annual Trade Waste fee applies to each such discharger.

Further information can be found in the Liquid Trade Waste Regulation Guidelines 2009 ("the Guidelines").

8.0 APPROVALS

Council's decision to accept Liquid Trade Waste into its sewerage system is on the basis of a preventive risk management framework for managing risks to the sewerage system within an integrated water cycle management context. It will be based on the discharge meeting Council's requirements.

When determining an application to discharge Liquid Trade Waste to the sewerage system, Council will consider a number of criteria (see Appendix 2) including:

- Factors for Consideration
- Discharge Quality

- Prohibited Substances
- Stormwater Discharges From Open Areas
- Food Waste Disposal Units
- Devices that Macerate or Pulverise Water
- Use of Additives in Pre-Treatment Systems

Any person wishing to discharge Trade Waste into Council sewer must obtain prior approval from Council under section 68 of the *Local Government Act, 1993*. Discharging Liquid Trade Waste without an approval is an offence under section 626 of the Act.

Liquid Trade Waste application forms can be found on Council's web site: Liquid Trade Waste Application Form

9.0 LIQUID TRADE WASTE SITE INSPECTIONS

9.1 Inspection Process

Council implements a regular inspection of commercial and industrial premises as part of the due diligence responsibility to monitor and audit the Liquid Trade Waste pre-treatment system for confirmation that the discharger is complying with the terms and conditions of an approval. All Trade Waste discharges need to be inspected at least annually with the exception of commercial premise preparing hot food which needs to be inspected 4 times per year. Fees are charged for inspections and are available from Council's Fees and Charges.

9.2 Re-inspections

A Re-inspection is required where incidents or breaches have occurred on a previous inspection or notification. A re-inspection fee should apply, the re-inspection may ascertain that:

- The non-compliance has been rectified
- Procedures have been initiated to prevent re-occurrence
- Steps have been taken to modify the pre-treatment
- Steps in an Effluent Improvement Plan have been completed
- A discharge may or may not be from the premises as the result of a pollution inquiry
- investigation such as a dumping incident.

10.0 NSW Framework for Regulation of Sewerage and Trade Waste

The NSW framework for regulation of sewerage and Trade Waste involves a preventative risk management approach, which has been developed to address the use of common pool resources by providing economic incentives for dischargers to minimise their Waste to consistently comply with their conditions of approval.

The framework outlines the following (see Appendix 3);

- NSW Framework for Regulation of Sewerage and Trade Waste,
- Alignment with the National Framework for Wastewater Source Management,
- Application procedures,
- Liquid Trade Waste discharge categories,
- Liquid Trade Waste services agreements,
- Monitoring of Liquid Trade Waste discharges,
- Liquid Trade Waste fees and charges, modification or revocation of approvals,
- Prevention of Waste of water, and
- Contaminated stormwater discharges from open areas.

APPENDIX – 1

PART 1 – EXEMPTIONS FOR OBTAINING APPROVAL OF LIQUID TRADE WASTE DISCHARGE.

Table 1: Exemptions

This table lists commercial business activities that the Director-General has consented to an exemption from the requirement to apply for approval for Liquid Trade Waste discharge to the sewerage system.

Each such business must meet the standard requirements specified below.
An annual Trade Waste fee applies to each such discharger.

Activity	Requirements
Beautician	Nil
Bed and Breakfast (not more than 10 persons including proprietor)	Sink strainers in food preparation areas. Housekeeping practices (see Note 4).
Community hall (minimal hot food)	Sink strainers in food preparation areas. Housekeeping practices (see Note 4).
Day care centre (no hot food prepared)	Sink strainers in food preparation areas. Housekeeping practices (see Note 4). Nappies are not to be flushed into the toilet.
Delicatessen (no hot food prepared)	Sink strainers in food preparation areas. Housekeeping practices (see Note 4).
Dental Surgery or Technician (no x-ray)	Plaster arrestor required.
Doctor's Surgery (plaster casts, no x-ray)	Plaster arrestor required.
Dog / cat groomer / salon	Floor Waste basket and sink strainer required (see Note 3). Animal litter and any Waste disposal products may not be discharged to sewer. No organophosphorus pesticides may be discharged to sewer.
Florist	Floor Waste basket and sink strainer required. No herbicides/pesticides may be discharged to sewer.
Fruit and vegetable - retail	Floor Waste basket and sink strainer required (see Note 3).
Funeral parlour	Floor Waste basket required. Formaldehyde is not to be discharged to the sewer.

Activity	Requirements
Hairdressing	Floor Waste basket and sink strainer (where available).
Jewellery shop **a. Miniplater** **b. Utrasonic washing** **c. Precious stone cutting**	a. Miniplater vessel to contain no more than 1.5 L of precious metal solution b. Nil c. If: < 1000 L/d plaster arrestor required If: > 1000 L/d general purpose pit required
Mixed business (minimal hot food)	Floor Waste basket and sink strainer required (see Note 3). Housekeeping practices (see Note 4).
Mobile cleaning units **a. Carpet cleaning** **b. Garbage bin washing**	a. 20 micron filtration system fitted to a mobile unit. b. Floor Waste basket required. Discharge is via grease arrestor (if available).
Motel (no hot food prepared and no laundry facility)	Floor Waste basket and sink strainer required (see Note 3). Housekeeping practices (see Note 4).
Nut shop	Floor Waste basket and sink strainer required (see Note 3).
Optical service – retail	Solids settlement tank/pit required.
Pet shop – retail	Floor Waste basket and sink strainer required (see Note 2).
Pizza reheating for home delivery	Housekeeping practices (see Note 4).
Sandwich shop, salad bar, juice bar, coffee shop (no hot food prepared)	Floor Waste basket and sink strainer required (see Note 3). Housekeeping practices (see Note 4).
Venetian blind cleaning	Nil (see Note 2).

Notes:

1. Where “required” is used it means as required by Council.
2. If activity is conducted outdoors, the work area is to be roofed and bunded to prevent stormwater ingress into the sewerage system.
3. All drainage from floors in food preparation areas is required to pass through a floor waste basket.
4. Food preparation activities need to comply with sound housekeeping practices including:
   a. Floor must be dry swept before washing
   b. Pre-wiping of all utensils, plates, bowls, etc. to the scrap bin before washing up
   c. Use of a food waste disposal unit is not permitted.

APPENDIX – 2

PART 2 – CRITERIA FOR APPROVAL TO DISCHARGE LIQUID TRADE WASTE INTO COUNCIL'S SEWERAGE SYSTEM

2.1 Factors for Consideration

Council's decision to accept Liquid Trade Waste into its sewerage system is on the basis of a preventive risk management framework for managing risks to the sewerage system within an integrated water cycle management[1] context. It will be based on the discharge meeting Council's requirements[2].

When determining an application to discharge Liquid Trade Waste to the sewerage system, Council will consider the following factors:

- The potential for the Liquid Trade Waste discharge to impact on public health
- The possible impacts the discharge may pose to the environment (land, water, air, noise, or nuisance factors)
- The potential impacts of the discharge on the health and safety of the Council's employees
- The possible impact of the discharge on Council's sewerage infrastructure or sewerage treatment process
- The capability of the sewerage system (both transportation and treatment components) to accept the quality and quantity of the proposed Liquid Trade Waste discharge
- The impact the Liquid Trade Waste will have on the ability of the sewerage scheme to meet its Environmental Protection Authority licence requirements
- Compliance of the proposed Liquid Trade Waste discharge with guideline limits in this policy
- The potential impacts of the discharge on the quality of, and management practices for, effluent and Bio-solids produced from the sewerage treatment process
- The adequacy of the pre-treatment process(es) to treat the Liquid Trade Waste to a level acceptable for discharge to the sewerage system, including proposed safeguards if the pre-treatment system fails
- Whether appropriate safeguards are proposed to avoid the discharge of other, non-approved Wastes to the sewerage system
- The adequacy of any chemical storage and handling facilities, and the proposed safeguards for preventing the discharge of chemicals to the sewerage system
- Whether prohibited substances are proposed to be discharged
- The potential for stormwater entering the sewerage system and adequacy of proposed stormwater controls
- Waste minimisation and water conservation programs
- The adequacy of the proposed due diligence program and contingency plan, where required.

1. *Integrated Water Cycle Management Guidelines for NSW Local Water Utilities*, DWE, October 2004.
2. In considering options for waste management to drive resource efficiency, the following order of preference set out on page 80 of the *Australian Sewerage Quality Management Guidelines, June 2012*, WSAA will be adopted:
    1. Avoidance
    2. Minimisation

3. Re-use
4. Recovery of energy
5. Treatment
6. Disposal

Note:
The quality of Trade Waste from some low risk commercial activities in Classification A will exceed guideline limits in Council's Trade Waste policy. As a higher level of pre-treatment is not cost effective, such waste is acceptable if the discharger installs and properly operates and maintains the required pre-treatment equipment. Similarly, septic and pan waste may exceed some guideline limits.

2.2 Discharge Quality

Council has guideline limits for the acceptance of discharges, as set out in Tables 2, 3 and 4 on pages 13 to 16. Council may vary the guideline limits for a particular sewerage treatment works. Where the guideline limits cannot be met, applicants are required to provide justification for exceeding the limits. Based on the type and the proposed contaminant levels, Council may refuse the application, or may approve it subject to an effluent improvement program or other conditions being implemented.

2.3 Prohibited Substances

Some substances are not suitable for discharge to the sewerage system. Table 5 sets out those substances which must not be discharged to the sewerage system. Council may not grant approval for the discharge of these substances to the sewerage system unless it is specifically approved under section 68 of the Local Government Act.

2.4 Stormwater Discharges from Open Areas

Stormwater is a prohibited discharge under this policy. The ingress of stormwater into the sewerage system can cause operational problems to the system and result in sewer overflows, as the sewerage system does not have the capacity for such flows. Therefore, Council does not generally accept the discharge of stormwater to the sewerage system.

However, it is recognised that it may not always be possible or practical to prevent all stormwater entering the sewerage system at some Liquid Trade Waste premises. The discharge of limited quantities of first flush stormwater from sealed areas will be considered where roofing cannot be provided because of safety or other important considerations. The discharge from unsealed areas is not permitted.

Before the stormwater will be considered for discharge to the sewerage system, the applicant must provide the following information:

- reasons why the area cannot be fully or partially roofed and bunded to exclude stormwater
- the dimensions and a plan of the open area under consideration
- whether the open area is sealed
- the estimated volume of the stormwater discharge
- information on rain gauging
- measures proposed for diverting stormwater away from the Liquid Trade Waste-generating area
- where a first-flush system is proposed, details on how the stormwater will be diverted to the drainage system after the first flush is accepted (the first flush to be limited to the first 10 mm of storm runoff)

- report on other stormwater management options considered and why they are not feasible

Note:
Trade Waste charges for the acceptance of stormwater to the sewerage system are indicated in section 3.7.8.

2.5 Food Waste Disposal Units

The use of food waste disposal units (also known as in-sinkerators, in-sink food waste disposers, or garbage grinders) is not permitted.

2.6 Devices That Macerate or Pulverise Waste

Macerators and any other similar devices that are used for pulverising of solid waste are not authorised to connect to Council's sewerage system. Solid waste includes, but is not limited to, sanitary napkin, placenta, surgical waste, disposable nappy, mache bedpan and urine containers.

2.7 Use of Additives in Pre-treatment Systems

Council does not allow solvents, enzymes, bio-additives, and odour control agents to be used in pre-treatment systems (except neutralising chemicals designated for the pre-treatment) except by specific written application and subsequent approval.

General Acceptance Guideline Limits

Parameter*	Limits*
Flow Rate	The maximum daily and instantaneous rate of discharge (kL/h or L/s) is set on the available capacity of the sewer. Large dischargers are required to provide a balancing tank to even out the load on the sewerage treatment works.
BOD^5 and Suspended Solids	Normally, approved at 300 mg/L each. Concentrations up to 600mg/L and in some cases higher for low mass loadings may be acceptable if the treatment works has sufficient capacity and odour will not be a problem.
COD	Normally, not to exceed BOD5 by more than three times. This ratio is given as a guide only to prevent the discharge of non-biodegradable Waste.
Total Dissolved Solids	Up to 4000 mg/L may be accepted. However, the acceptance limit may be reduced depending on available effluent disposal options and will be subject to a mass load limit.
Temperature	Less than 38°C.

Parameter*	Limits*
pH	Within the range 7.0 to 9.0.
Oil and Grease	100 mg/L if the volume of the discharge does not exceed 10% of the design capacity of the treatment works, and 50 mg/L if the volume is greater than 10%.
Detergents	All industrial detergents are to be biodegradable. A limit on the concentration of 50 mg/L (as MBAS) may be imposed on large Liquid Trade Wastes.

Notes; * See Glossary for explanation of terms
Refer to *Australian Sewerage Quality Management Guidelines, June 2012,* WSAA for recommended analytical methods

Table 2: Guideline Limits for Acceptance of Liquid Trade Waste into Sewerage System

Colour	No visible colour when the Waste is diluted to the equivalent dilution afforded by domestic sewerage flow.
Radioactive Substances	The discharge must comply with the *Radiation Control Act 1990*

Table 3: Guideline Limits for Acceptance of Inorganic and Organic Liquid Trade Waste Compounds into Sewerage System - Acceptance Guideline Limits for Inorganic Compounds

Parameter	Maximum Concentration mg/L
Ammonia (as N)	
Boron	
Bromine	
Chlorine	
Cyanide	
Fluoride	
Nitrogen (TKN)	
Phosphorus (Total)	
Sulphate (As SO4)	
Sulphide (As S)	
Sulphite (As SO3)	
Benzene	

Acceptance Guideline Limits for Organic Compounds

Parameter	Maximum Concentration mg/L
Toluene	0.5
Ethylbenzene	1
Xylene	1
Formaldehyde	30
Phenolic compounds (except pentachloropenol)	5
Petroleum Hydrocarbons (non-flammable)*	30
Pesticides general (except organochlorine and organophosphorus)*	0.1
Polynuclear Aromatic Hydrocarbons (PAHs)	5

*Refer Table 3

Table 4: Guideline limits for acceptance of Liquid Trade Wastes containing metals into sewerage system

Acceptance Guideline Limits for Organic Compounds

Parameter	Maximum Concentration (mg/l)	Allowed daily mass limit (gm/d)
Aluminium	100	-
Arsenic	1	2
Cadmium	1	6
Chromium*	3	15
Cobalt	5	15
Copper	5	15
Iron	100	-
Lead	1	6
Manganese	10	30
Mercury	0.01	0.05
Molybdenum	5	30
Nickel	3	15
Selenium	1	15
Silver	2#	6

Parameter	Maximum Concentration (mg/l)	Allowed daily mass limit (gm/d)
Tin	5	15
Zinc	5	15
Total heavy metals excluding aluminium, iron and manganese	Less than 30 mg/L and subject to total mass loading requirements	

Notes:

* Where hexavalent chromium (Cr6+) is present in the process water, pre-treatment will be required to reduce it to the trivalent state (Cr3+), prior to discharge into the sewer.

Discharge of hexavalent chromium (Cr6+) from chromate compounds used as corrosion inhibitors in cooling towers is not permitted.

This limit is applicable to large dischargers. The concentration of silver in photo-processing Waste where a balancing tank is provided is not to exceed 5 mg/L.

Table 5: Substances Prohibited From Being Discharged Into the Sewerage System

1	Organochlorine weedicides, fungicides, pesticides, herbicides and substances of a similar nature and/ or Wastes arising from the preparation of these substances.
2	Organophosphorous pesticides and/ or Waste arising from the preparation of these substances.
3	Any substance liable to produce noxious or poisonous vapours in the sewerage system.
4	Organic solvents and mineral oil.
5	Any flammable or explosive substance.
6	Discharges from 'Bulk Fuel Depots'.
7	Chromate from Cooling Towers.
8	Natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions.
9	Rain, surface, seepage or subsoil water, unless specifically permitted.
10	Solid matter.
11	Any substance assessed as not suitable to be discharged into the sewerage system.
12	Waste that contains pollutants at concentrations which inhibit the sewerage treatment process – refer *Australian Sewerage Quality Management Guidelines, June 2012, WSAA*
13	Any other substance/ s listed in relevant regulations.

APPENDIX – 3

PART 3 – FRAMEWORK FOR REGULATION OF LIQUID TRADE WASTE

3.1 The NSW Framework for Regulation of Sewerage and Trade Waste

Due to the Tragedy of the Commons[1] in the use of common pool resources, sound regulation of sewerage and Trade Waste requires implementation of **all** the following integrated measures:

1. Preparation and implementation of a sound Trade Waste regulation policy, assessment of each Trade Waste application and determination of appropriate conditions of approval. The conditions must be consistent with the LWU's Integrated Water Cycle Management Strategy and demand management plan. In addition, execution of a Liquid Trade Waste Services Agreement is required for large dischargers to assure compliance.
2. Preparation and implementation of a sound Development Servicing Plan[2], with commercial sewerage developer charges to ensure new development pays a fair share of the cost of the required infrastructure.
3. Full cost recovery with appropriate sewer usage charges[3] and Trade Waste fees and charges[4] in order to provide the necessary pricing signals to dischargers. These charges must include non-compliance Trade Waste usage charges and non-compliance excess mass charges in order to provide the necessary incentives for dischargers to consistently comply with their conditions of approval.
4. Monitoring, mentoring and coaching of dischargers in order to achieve cleaner production and assist them to comply with their conditions of approval.
5. Enforcement, including appropriate use of penalty notices under section 222 of the *Protection of the Environment Operations Act 1997.* Orders may also be issued and penalties imposed for offences under sections 626, 627 and 628 of the *Local Government Act 1993.*
6. Disconnection of a Trade Waste service in the event of persistent failure to comply with the LWU's conditions of approval.

Together, the above six measures comprise the NSW framework for regulation of sewerage and Trade Waste. The framework involves a preventive risk management approach, which has been developed to address the use of common pool resources by providing economic incentives for dischargers to minimise their Waste and to consistently comply with their conditions of approval.

Notes:

[I] In the absence of appropriate controls and measures (such as conditions of approval, a sewer usage charge, a Trade Waste usage charge, a non-compliance Trade Waste usage charge, excess mass charges, noncompliance excess mass charges and penalty notices), it would be in the economic interest of each Trade Waste discharger to minimise their efforts and expenditure on control and pre-treatment of their Trade Waste before discharging it to the sewerage system. In the past, failure to implement these measures has caused multi-million dollar damage to sewerage networks, pumping stations and treatment works (refer to the examples shown on pages 30, 47 and 48 of the Liquid Trade Waste Regulation Guidelines, 2009).

[2]In accordance with the *NSW Developer Charges Guidelines for Water Supply, Sewerage and Stormwater, 2002.*
[3]In accordance with page 29 of the *NSW Water Supply, Sewerage and Trade Waste Pricing Guidelines, 2002.*
[4]In accordance with Appendices D and I of the *Liquid Trade Waste Regulation Guidelines, 2009.*

3.2 Alignment with the National Framework for Wastewater Source Management

The NSW framework for regulation of sewerage and Trade Waste is outlined in section 3.1.
The NSW framework is driven by the NSW Government's Best-Practice Management of Water Supply of Sewerage Guidelines, 2007 and is consistent with that in the National Framework for Wastewater Source Management[5]. In particular, under the Best-Practice Management Guidelines each LWU is required to achieve the following outcomes:

- Prepare and implement a 30-year Integrated Water Cycle Management Strategy, demand management plan, pay-for-use water supply pricing and community and customer involvement (Elements 1, 6, 8)
- Annual performance monitoring, including an annual triple bottom line (TBL) Performance Report and Action Plan to identify and address any areas of under-performance (Elements 5, 6, 9, 10, 11, 12)
- Achieve full cost recovery for water supply, sewerage and Trade Waste services and apply an appropriate non-residential sewer usage charge (Elements 3, 8)
- Prepare and implement a sound Trade Waste regulation policy and issue an appropriate approval to each Trade Waste discharger, including Waste minimisation and cleaner production (Elements 1, 2, 3, 4, 7, 8)
- Appropriate Trade Waste fees and charges (including incentives to comply with LWU's approval conditions through non-compliance Trade Waste usage charges and non-compliance excess mass charges) (Elements 3, 8)
- Trade Waste services agreement for large dischargers to assure compliance (Elements 3, 8)
- Appropriate training of LWU staff and monitoring, mentoring and coaching of Trade Waste dischargers (Elements 1, 4, 5, 7, 8)
- Enforcement, including appropriate use of penalty notices or orders (Elements 3, 8)
- Disconnection of a Trade Waste service in the event of persistent failure to comply with the LWU's conditions of approval (Element 8).

Note:
[5] The following 12 elements of the *National Framework for Sewerage Quality Management* are set out on page 18 of the *Australian Sewerage Quality Management Guidelines, June 2012, WSAA:*

Commitment

1. Commitment to Wastewater Source Management

System Analysis and Management

2. Assessment of the Wastewater System
3. Preventative Measures for Wastewater Input Quality Management
4. Operational Procedures and Process Control
5. Verification of Wastewater Inputs Quality
6. Management of Incidents/ Complaints and Emergencies

Supporting Requirements

7. Employee awareness and training
8. Customer and stakeholder involvement and awareness
9. System Validation and Research and Development
10. Documentation and Reporting

Review

11. Evaluation and Audit
12. Review and Continual Improvement

3.3 Application Procedures

To obtain Council's approval to discharge Liquid Trade Waste to Council's sewerage system, a discharger must lodge an application in writing. Application forms are available from Council. If a person wishes to discharge Liquid Trade Waste to the sewerage system but is not the owner of the premises, the person must obtain the owner's consent to the application.
The applicant must provide the following information:

- site owner's full name, address, contact telephone number
- address of the business/industry where discharge to the sewerage system will occur
- name of contact person for the premises and telephone contact for the business/industry
- type of process/activity generating the Liquid Trade Waste
- normal hours of business operation
- rate of discharge, including
  – the average per day, maximum per day and per hour, and
  – hours of the day during which discharge will take place
- characteristics of Wastes, including
  – nature of source
  – expected maximum and average concentrations of pollutants

(Where sampling and testing are required to establish the quality of the Liquid Trade Waste, the testing should be carried out in accordance with the procedures set out in the Standard Methods for the Examination of Water and Wastewater published by the American Public Health Association, American Water Works Association and Water Pollution Control Federation).

- chemicals to be used
- details of any proposed pre-treatment facilities, location and site plan. Details should include:
  – pre-treatment process details
  – internal Wastewater drainage
  – pump size
  – rising main size, length and profile
  – system operational characteristics
  – operational procedures
  – provisions for sampling and flow measurement, where required
  – proposed connection point to the sewerage system
  – flow diagram and hydraulic profile of proposed Liquid Trade Waste pre-treatment facilities
  – maintenance schedule for pre-treatment equipment, including contractor's details
- stormwater drainage plan
- measures for prevention of stormwater ingress into the sewerage system
- location, nature and chemical composition of all substances stored/used on site
- justification for disposing of the Waste into the sewerage system over other possible options (if any)

- methods of disposal for other Wastes that are not discharged to the sewerage system
- any relevant environmental impact assessments
- any additional information as requested by Council.

The following information needs to be provided in regard to the discharge of septic tank and pan Waste to the sewerage system:

- dentification of the pump out service provider
- proposed method of discharge including plans and drawings if appropriate
- details of any proposed facilities for a disposal point, location and site plan (if applicable).

Details should include:

- the proposed connection point to the sewerage system
- arrangements at the proposed disposal site (if applicable)
- the provision of freshwater for hosing down where needed
- bunding and measures to prevent the ingress of stormwater at the proposed dump point, if applicable
- the use of odour inhibiting or other chemicals, if any, and their dosage rates
- statement that septic effluent will not be mixed with septage or grease trap pump out, i.e. dedicated tankers will be used for each type of Waste
- for boat/ marina facility – the type and number of vessels either moored at the marina and/ or would utilise the pump-out facility on a regular basis:

  – private

  – commercial
- Council may, under section 86 of the Local Government Act, request an applicant to provide more information to enable it to determine the application.

3.4 Approval of Applications

Where an application is approved, Council will notify the applicant as soon as practical of the approval and any conditions of the approval. Where a lawful business activity operates with development consent, an approval issued under section 68 Local Government Act 1993 (to dispose of Waste to Council's sewer) remains in effect until such time as the character of the Waste or scale of the activity alters from that approved.

In cases where Council requires a discharger to enter into a Liquid Trade Waste services agreement (refer to section 3.9 on page 38), Council will issue a deferred commencement approval under section 95 of the Local Government Act requesting the discharger to do so within the time specified in Council's letter. In such cases, the approval will not be operative until the agreement has been executed by the discharger.

An applicant may make a minor amendment or withdraw an application before it is approved by Council. An applicant may also apply to Council to renew or extend an approval, in accordance with section 107 of the Local Government Act.

An approval to discharge Liquid Trade Waste to Council's sewer is not transferable. A new application must be lodged and a new approval must be obtained if there is a change of the approval holder or the activity. Council must be notified of change of ownership and/or occupier in all cases, whether a new approval is required or not, to allow updating of records. If an application is refused, Council will notify the applicant of the grounds for refusal.

3.5 Concurrence

If Council supports an application and has a notice stating that concurrence of the Director-General, of the Trade and Investment, Regional Infrastructure and Services (DTIRIS) can be assumed for the Waste relevant to the application, Council will approve the application. Otherwise, Council will seek concurrence in accordance with the requirements of section 90(1) of the Local Government Act. All such concurrence requests will be provided to the NSW Office of Water.

Liquid Trade Waste discharges are divided into four (4) Concurrence Classifications for the purpose of the concurrence process:

Concurrence Classification A	Liquid Trade Waste discharges for which Council has been authorised to assume concurrence to the approval subject to certain requirements.
Concurrence Classification B	Liquid Trade Waste dischargers whereby Council may apply for authorisation to assume concurrence to the approval subject to certain requirements.
Concurrence Classification S	The acceptance of septic tank, pan Waste and ship to shore pump out. Council may apply for authorisation to assume concurrence to the approval subject to certain conditions.
Concurrence Classification C	All other Liquid Trade Waste dischargers that do not fall within Concurrence Classification A, B or S, and therefore require Council to forward the application for concurrence.

All Councils have been authorised to assume concurrence for Concurrence Classification A Liquid Trade Waste discharges. These are listed in Table 6 and Council will not need to seek concurrence for approval of the Trade Waste applications for these activities.

Table 6: Liquid Trade Waste Discharges with Automatic Assumed Concurrence

Commercial retail food preparation activities	Other commercial activities
Bakery (retail)	Animal wash (pound, stables, racecourse, kennels, mobile animal wash and veterinary with no X-ray)
Bed and Breakfast (< 10 persons)	Beautician
Bistro	Boiler blowdown
Boarding house/ hostel kitchen	Car detailing
Butcher shop (retail)	Car detailing

Commercial retail food preparation activities	Other commercial activities
Café/ coffee shop/ coffee lounge	Craft activities (making of clay pottery, ceramics, cutting and polishing of gemstones or making of jewellery at clubs, cottage industries)
Canteen	Dental surgery/dental specialist
Chicken/poultry shop (only fresh chickens/game sold)	Dental technician
Chicken/poultry shop (retail BBQ/ charcoal chicken)	Doctor's surgery, medical centre - plaster casts (no x-rays)
Club (kitchen Wastes)	Florist
Community hall/ civic centre	Funeral parlour, morgue
Day care centre	Hairdressing (includes barbers)
Delicatessen	Jewellery shop
Doughnut shop	Laboratory (pathology/ analytical)
Fast food outlet (McDonalds, KFC, Burger King, Pizza Hut, Red Rooster, etc.)	Laundry or laundromat (coin operated)
Fish shop (retail – fresh and/or cooked)	Lawnmower repairs
Food caravan	Mechanical repairs/ workshop
Fruit and vegetable shop (retail)	Optical service
Function centre	Pet shop (retail)
Hotel / Nightclub	Photographic tray work/ manual development
Ice cream parlour	Plants retail (no nursery)
Juice bar	School (Primary and Secondary)
Mixed business	Stone working
Motel	Swimming pool/ spa/ hydrotherapy

Commercial retail food preparation activities	Other commercial activities
Nursing home kitchen	Vehicle washing (by hand/ wand, automatic car wash, external truck wash or underbody/ engine degrease only)
Nut shop	Venetian blind cleaning
Patisserie	Veterinary/ animal kennels with X-ray
Pie shop	Waterless minilab
Pizza shop	
Restaurant	
Salad bar/ Sandwich shop/ School	
canteen/ cafeteria	
Supermarket (with butcher/ delicatessen/ seafood/ or charcoal chickens)	
Take-away food outlet	

Note:
The volume of Liquid Trade Waste must not exceed 5 kL/d or 1000 kL/a, except in the case of commercial retail food preparation activities, where up to 16 kL/d is included in this category. If the Waste discharged to the sewer exceeds these volumes, the application must be treated as Concurrence Classification B.

Discharges over 20 kL/d must be treated as Concurrence Classification C.

3.6 Liquid Trade Waste Charging Categories

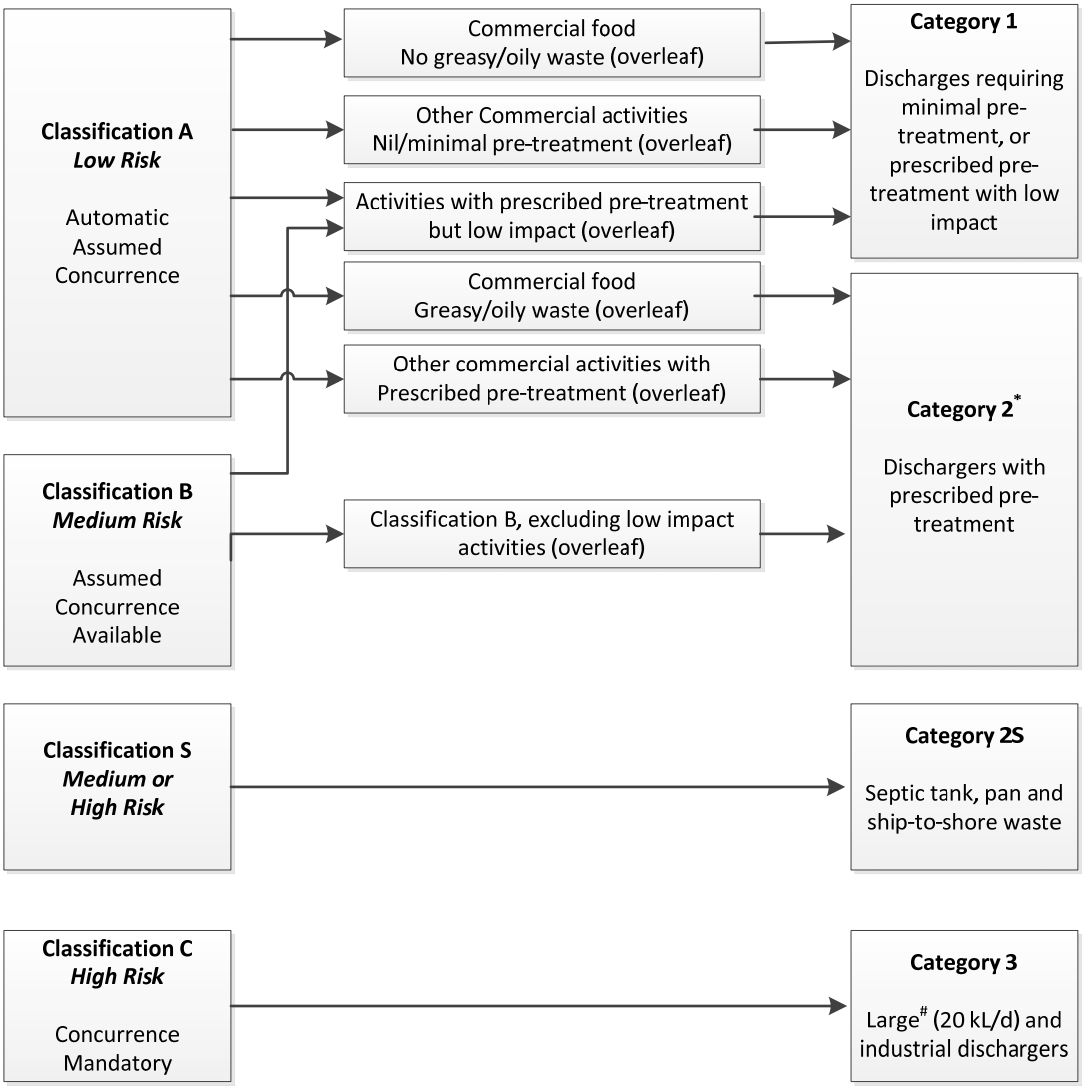
Four (4) classifications of Liquid Trade Waste have been established for concurrence purposes, Classification A, B, C and S (refer section 3.5).

For Trade Waste charging purposes there are also four (4) Charging Categories: Category 1, 2, 2S and 3 (refer section 3.7).

Figure 1 (next page) shows that:

- Classification A dischargers fall into Charging Category 1 or Category 2.
- Classification B dischargers fall into Charging Category 2, except for a few dischargers with low impact on the sewerage system, which fall into Charging Category 1.
- Classification S dischargers fall into Charging Category 2S.
- Classification C dischargers fall into Charging Category 3.

Liquid Trade Waste Classifications:



Category 1 Liquid Trade Waste dischargers are those conducting an activity deemed by Council as requiring nil or only minimal pre-treatment equipment and whose effluent is well defined and of a relatively low risk to the sewerage system. In addition, Category 1 includes dischargers requiring prescribed pre-treatment but with low impact on the sewerage system.

Classification A activities – Commercial retail food preparation activities that do not generate an oily/greasy Waste:
bakery (only bread baked on-site), bistro (sandwiches, coffee only), café/coffee shop/coffee lounge, canteen, community hall (minimal food), day care centre, delicatessen, fruit and vegetable shop, hotel, ice cream parlour (take away only), juice bar, mixed business, motel, nightclub, nut shop, pizza cooking/reheating (no preparation or washing up on-site, pizza heated and sold for consumption off-site), potato peeling (small operation), sandwich hop/salad bar, take away food outlet.

Classification A activities – Other commercial activities:
animal wash, beautician/hairdressing, crafts <1000 L/d, dental surgery (plaster casts, no X-ray unless digital), doctor's surgery and medical centre (plaster casts, no X-ray), florist, funeral parlour, mobile cleaning units, morgue, jewellery shop, optical service (retail), pet shop, plants retail (no nursery), public swimming pool, photographic (tray work/manual development), venetian blind cleaning, veterinary (no X-ray).

Classification A or B activities – dischargers with prescribed pre-treatment with low impact on the sewerage system:
boiler blowdown, cooling tower, industrial boilers, laboratory (analytical/pathology/tertiary institution), laundry, primary and secondary school[6], vehicle washing.

Note:
[6] If significant hot food preparation is carried out, Category 2 charges may be levied by Council.

Category 2 Discharger
Category 2 Liquid Trade Waste dischargers are those conducting an activity deemed by Council as requiring a prescribed type of Liquid Trade Waste pre-treatment equipment and whose effluent is well characterised.

Trade Waste dischargers with prescribed pre-treatment[7] include:

Classification A activities: Premises that **prepare and/or serve hot food or foods that generate an oily/greasy Waste:** bakery (pies, sausage rolls, quiches, cakes, pastries with creams or custards), bistro, boarding house/ hostel kitchen, butcher, café/ coffee shop/ coffee lounge, cafeteria, canteen, fast food outlet, chicken/poultry shop, club, community hall[8], commercial kitchen/caterer, nursing home, patisserie, supermarket, doughnut shop, fish shop (cooking on- site), function centre, hotel, ice cream parlour, motel, nightclub, pizza cooking, restaurant, sandwich shop/salad bar, take away food outlet.

Note: **[7]** Excludes low impact activities, listed under Category 1.
[8] If the type and size of kitchen fixtures installed enable catering for large functions.

Other commercial Classification A activities: car detailing, craft activities > 1000 L/d, dental surgery with X-ray, lawnmower repairs, mechanical workshop, stone working, veterinary (with Xray), waterless mini-lab.

Other Classification A Activities: fish shop (fresh fish for retail).

Classification B Activities: auto dismantler, bus/coach depot, construction equipment maintenance and cleaning, equipment hire, maintenance and cleaning, glass cutting and grinding, graphic arts, hospital (with or without X-ray), medical centre (with X-ray), optical services (at medical or educational facilities, workshops), oyster processing – shucking, panel beating, photographic lab, radiator repairer, screen printing, service station forecourt, shopping complex, water wash mini-lab, X-ray radiologist.

Category 2S Discharger
Category 2S dischargers are those conducting an activity of transporting and/or discharging septic tank or pan content Waste into the sewerage system.

Trade Waste dischargers include the following Classification S activities: bus/rail coaches/caravan/motor home/caravan park Waste dump points, mooring/marina dump points, pan Waste, portable chemical toilet Waste, septage, septic tank effluent, ship-to-shore pump-outs (galley Waste and toilet Waste).

Category 3 Discharger (large or industrial Waste dischargers)
Category 3 Liquid Trade Waste dischargers are those conducting an activity which is of an industrial nature and/or which results in the discharge of large volumes (over 20 kL/d) of Liquid Trade Waste to the sewerage system. Any Category 1 or 2 discharger whose volume exceeds 20 kL/d becomes a Category 3 discharger, except shopping complexes and institutions (e.g. hospitals, educational facilities, correctional facilities, etc.)

Large Trade Waste dischargers and other Classification C activities include: abattoir, bakery (wholesale), brewery, cooling towers, cosmetics/perfumes manufacture, dairy processing (milk/cheese/yoghurt/ice cream etc.), food processing (cereals/cannery/condiments/ confectionary/edible oils/fats/essence/ flavours/fish/fruit/ juice/gelatine/honey/meat/ pickles/smallgoods/tea and coffee/vinegar/yeast manufacture etc.), fruit and vegetable processing, flour milling, glue manufacturer, egg processing, pet food processing, plants nursery (open areas), potato processing, poultry processing, saleyards, seafood processing, soft drink/cordial manufacture, starch manufacture, sugar refinery, tanker washing, tip leachate, transport depot/ terminal, water treatment backwash, wholesale meat processing, winery, wine/spirit bottling.

Dischargers of industrial Waste include the following Classification C activities: acid pickling, adhesive/latex manufacture, agricultural and veterinary drugs, anodising, bitumen and tar, bottle washing, cardboard and carton manufacture, carpet manufacture, caustic degreasing, chemicals manufacture and repackaging, contaminated site treatment, cyanide hardening, detergent/soaps manufacture, drum washing, electroplating, engine gearbox reconditioning, extrusion and moulding (plastic/metal), feather washing, fellmonger, felt manufacture, fertilisers manufacture, fibreglass manufacture, filter cleaning, foundry, galvanising, glass manufacture, ink manufacture, laboratories (excluding those in Category 2), Liquid Wastewater treatment facility (grease trap receival depot and other pump-out Waste depot), metal finishing, metal processing (refining/ rumbling/ non-cyanide heat treatment/ phosphate/ photo engraving/ printed circuit etching/ sheet metal fabrication etc.), mirrors manufacture, oil recycling (petrochemical) and refinery, paint stripping, paint manufacture, paper manufacture, pharmaceuticals manufacture, plaster manufacture, powder coating, printing (newspaper, lithographic), sandblasting, slipway, tannery, timber processing (joinery and furniture/plywood/hardwood), textile manufacture (wool dyeing/ spinning/ scouring), truck washing (internal), waxes and polishes.

3.7 Liquid Trade Waste Fees and Charges

Council provides sewerage and Liquid Trade Waste services on a commercial basis, with full cost recovery through sewerage and Liquid Trade Waste fees and charges. Council's proposed fees and charges are advertised annually for public comment in its draft Management Plan. In addition to the Trade Waste fees and charges described below, Council may elect to include any Trade Waste charges shown in Appendix I of the *Liquid Trade Waste Regulation Guidelines, 2009*.

Liquid Trade Waste discharged to the sewerage system from industrial, commercial or other non-residential customers can impose significant costs on sewerage transport and treatment

facilities. To recover these costs and to ensure removal of existing significant cross-subsidies from residential customers, in addition to a two-part tariff with an appropriate **sewer usage charge/kL** for non-residential sewerage, appropriate fees and charges are levied for Liquid Trade Waste.
Council's Liquid Trade Waste fees and charges may include:

- Application fee
- Annual Trade Waste fee
- Re-inspection fee
- Trade Waste usage charge
- Septic tank and pan Waste disposal charge
- Excess mass charges
- Non-compliance Trade Waste usage charge
- Non-compliance excess mass charge and pH charge
- Non-compliance penalty.

3.7.1 Application Fee

The application fee recovers the cost of administration and technical services provided by Council in processing applications for approval to discharge Liquid Trade Waste to the sewerage system. The application fee will be allocated on the basis of the category into which the discharger is classified and reflects the complexity of processing the application. Application fees will be set annually by Council.

3.7.2 Annual Trade Waste Fee

The purpose of this fee is to recover the cost incurred by Council for administration and the scheduled inspections each year to ensure a Liquid Trade Waste discharger's ongoing compliance with the conditions of their approval. Annual Liquid Trade Waste fees are determined on the basis of the category of the discharger and are proportionate to the complexity of their inspection and administration requirements. Annual Trade Waste fees will be set by Council. Where the discharger is required to pay for monitoring this will be charged on the basis of full cost recovery. The Annual Trade Waste Fees for 2017/18 are;
Category 1 & 2 - $195.00 (No GST applicable)
Category 3 - $690.00 (No GST applicable)

3.7.3 Re-inspection Fee

Where non-compliance with the conditions of an approval has been detected and the discharger is required to address these issues, Council will undertake re-inspections to confirm that remedial action has been satisfactorily implemented. Council will impose a fee for each re-inspection. The re-inspection fee will be set annually by Council on the basis of full cost recovery. A re-inspection may include the monitoring of Liquid Trade Waste discharges, the cost of which may be recovered from the discharger.

The re-inspection fee for 2017/18 is $98.00 per inspection.

3.7.4 Trade Waste Usage Charge

The Trade Waste usage charge is imposed to recover the additional cost of transporting and treating Liquid Trade Waste from Category 2 dischargers.

Trade Waste Usage Charge ($) = Q x $1.95/kL (2017/18$)*
Where Q = Volume (kL) of Liquid Trade Waste discharged to sewer.

Note: *2017/18 rate and is subject to change in the annual review of fees and charges.
The fee charged where there is no onsite pre-treatment is $14.50 per kL

3.7.5 Excess Mass Charges

Excess mass charges will apply for substances discharged in excess of the deemed concentrations in domestic sewerage shown in Table 7 below. For excess mass charge calculation, equation (1) below will be applied.

Table 7: Deemed concentration of substances in domestic sewerage

Substance	Concentration (mg/L)
Biological Oxygen Demand (BOD^5)	300
Suspended Solids	300
Total Oils and Grease	50
Ammonia (as Nitrogen)	35
Total Kjeldahl Nitrogen (TKN)	30
Total Phosphorous	10
Total Dissolved Solids	1000
Sulphate (SO4)	50#

Note: # The concentration in the potable water supply to be used if it is higher than 50mg/L.

Equation (1)

Liquid Trade Waste Excess Mass Charge ($) = $\frac{(S - D) \times Q \times U}{1{,}000}$

Where:

S = Concentration (mg/L) of substance in sample
D = Concentration (mg/L) of substance deemed to be present in domestic sewerage
Q – Volume (kL) of Liquid Trade Waste discharged to the sewerage system
U = Charging rate ($/kg) for discharge of substance to the sewerage system.
Charging rates (U) used in equation (1) are as shown in Council's Annual Management Plan.
With regard to BOD, equation (1) applies for BOD^5 up to 600mg/L.

Excess Mass Charges for BOD Exceeding 600mg/L

If Council approves the acceptance limits for BOD5 higher than 600mg/L, an exponential type equation will be used for calculation of the charging rate Ue ($/kg) as shown in equation (2). Equation (2) provides a strong incentive for dischargers to reduce the strength of Waste. In addition, equation (5) on page 34 will be used where the discharger has failed to meet their approved BOD limit on two (2) or more instances in a financial year.

Ue is the excess mass charging rate for BOD ($/kg).

Equation (2)

$$U_e = 2C \times \frac{(\text{Actual BOD} - 300\text{mg/L})}{600\text{mg/L}} \times 1.05 \qquad \frac{(\text{Actual BOD } 600\text{mg/L})}{(600\text{mg/L})}$$

Where C = the charging rate ($/kg) for BOD5 600mg/L.
Actual BOD = the concentration of BOD5 as measured in a sample
For example if C = $0.623/kg, equation (2) would result in the following excess mass charging rates:
$0.623/kg for BOD5 600mg/L
$1.96/kg for BOD5 1200mg/L
$5.05/kg for BOD5 2400mg/L
The excess mass charge for BOD is calculated using equation (1):

$$\text{Excess Mass Charge for BOD (\$)} = \frac{(S - D) \times Q \times U_e}{1{,}000}$$

3.7.6 Non-Compliance Charges

Category 1 and 2 Dischargers
If the discharger has not installed or maintained appropriate pre-treatment equipment, the following Trade Waste usage charges will be applied for the relevant billing period:
Category 1 Discharger: $3.90/kL (2017/18$)
Category 2 Discharger: $29.00/kL (2017/18$)

Category 3 Discharger

Non-compliance pH charge
Equation (3) is used for Waste with pH being outside the approved range. This equation provides an incentive for dischargers to apply appropriate pH correction, so their Waste remains within the approved pH limits. Council may require industrial and large dischargers to install and permanently maintain a pH chart recorder or data logger as control of pH is critical to minimising odour and corrosion problems in the sewerage system.

Charging rate for pH where it is outside the approved range for the discharger =

Equation (3)
K x (actual pH – approved pH)# x 2 *(actual pH – approved pH)*#

Where:
K = pH coefficient = 0.98 (2017/18$) and needs to be adjusted in accordance with changes in the CPI.
# absolute value to be used.

Example: Council has approved the pH range 8.0 to 9.0 for a large discharger generating high strength Trade Waste in order to prevent corrosion and odour problems in the sewerage system.

Case 1: pH measured 7.0
Charging rate ($/kL) = 0.98 x [7 – 8] x $2^{(7-8)}$ = $1.96/kL

Case 2: pH measured 11.0
Charging rate ($/kL) = 0.38 x [11-9] x $2^{(11-9)}$= $3.92/kL

Non-compliance excess mass charge

Where a discharge quality fails to comply with the approved concentration limits of substances specified in Council's approval conditions (or the acceptance criterion listed in Council's Trade Waste policy), Council incurs additional costs in accepting and treating that Waste. Council may also face problems with the effluent and biosolids management.

In order to recover Council's costs, equation (4) shall apply for non-compliance excess mass charges, except for BOD where equation (5) shall apply.

Equation (4)

$$\text{Non-compliance Excess Mass Charges (\$)} = \frac{(S - A) \times Q \times 2 \times U}{1000} + \frac{(S - D) \times Q \times U}{1000}$$

Where:

S = Concentration (mg/L) of substance in sample.

A = Approved maximum concentration (mg/L) of pollutant as specified in Council's approval (or Liquid Trade Waste policy).

Q = Volume (kL) of Liquid Trade Waste discharged for the period of non-compliance.

U = Excess mass charging rate ($/kg) for discharge of pollutant to sewerage system, as shown in Council's Annual Management Plan.

D = Concentration (mg/L) of substance deemed to be present in domestic sewerage.

Non-compliance excess mass charges for BOD

If a discharger has failed to meet the approved maximum concentration of BOD on two or more instances in a financial year, the non-compliance excess mass charging rate for BOD Un will be levied on the basis of equation (5):

Equation (5)

Un is the BOD non-compliance excess mass charging rate.

$$U_n = 2C \times \frac{(A - 300 mg/L)}{600 mg/L} \times 1.05^{\frac{(A - 600\ mg/L)}{600\ mg/L}} + 4C \times \frac{(Actual\ BOD - A)}{600\ mg/L} \times 1.05^{\frac{(Actual BOD - A)}{600\ mg/L}}$$

For example, if C = $0.623/kg, BOD5 actual (measured) level is 2400mg/L and the approved maximum concentration of BOD (A) is 1000mg/L, equation (5) would result in a non-compliance excess mass charging rate of $14.50/kg.

Non-compliance Excess Mass Charge for BOD is calculated using equation (1):

$$\text{Non-compliance Excess Mass Charge (\$)} = \frac{(S - D) \times Q \times Un}{1{,}000}$$

The non-compliance excess mass charges shown above are in lieu of the excess mass charges in section 3.7.5.

***N.B**. Council will continue applying the above non-compliance excess mass charge until the quality of discharge complies with Council's approved quality (or the Trade Waste policy) limits, within the time frame determined by Council for remedying the problem. If the discharger fails to rectify the problem within this time frame, the discharger may be required to cease discharging Liquid Trade Waste into Council's sewerage system and may also be required to pay a 'non-compliance penalty'as indicated in the following section.*

3.7.7 Non-Compliance Penalty

The non-compliance penalty covers instances where Council may seek compensation for its costs relating to legal action, damage to infrastructure, incurred fines and other matters resulting from illegal, prohibited or unapproved Liquid Trade Waste discharged to the sewerage system. Also included are fines under:

- Protection of the Environment Operations Act 1997, section 120(1) (Pollution of any waters by a discharger who fails to comply with the conditions of approval for discharge of Liquid Trade Waste to sewer)
- *Local Government Act, 1993*, section 627 (Failure to comply with an approval), section 628

  (Failure to comply with an order). Non-compliance penalties will be pursued by legal action.

3.7.8 Discharge of stormwater to the sewerage system

The discharge of stormwater, surface and subsoil waters to the sewerage system is prohibited under this policy. As indicated in section 2.4, the acceptance of first flush stormwater runoff may be permitted. A charge of $29.00kL (2017/18$) will be applied to Category 3 dischargers in accordance with the non-compliance Trade Waste usage charge, if approval is granted to accept the above waters. Excess mass charges may also be applied in accordance with section 3.7.5.

3.7.9 Septic and pan Waste disposal charge

This charge is imposed to recover the cost of accepting and treating septic tank and pan Waste.

Septic tank and pan Waste disposal charge ($) = Q x S

Where:

Q = Volume (kL) of Waste discharged to sewer.

S = Charging rate in $/kL for septic tank effluent, septage or chemical toilet Waste as indicated in Council's Published Fees and Charges

3.7.10 Responsibility for payment of fees and charges

Property (land) owners are responsible for the payment of fees and charges for water supply, sewerage and Liquid Trade services provided by Council. This includes property owners of marina, caravan park, etc., if a dump point located at their premises is connected to the sewerage system.

Where another party (lessee) leases premises, any reimbursement of the lessor (property owner) for such fees and charges is a matter for the lessor and the lessee.

Council will charge a septic tank and pan Waste disposal charge for services it provides to transporters of septic tank and pan Waste tankered and discharged to the sewerage system.

Table 8: Summary of Trade Waste Fees and Charges

ARGING CATEGORY	LICATION FEE	NUAL NON-RESIDENTIAL SEWERAGE BILL WITH APPROPRIATE SEWERAGE USAGE CHARGE/ kL	NUAL TRADE WASTE FEE	-INSPECTION FEE (When Required)	ADE WASTE USAGE CHARGE/kL	PTIC WASTE DISPOSAL CHARGE	CESS MASS CHARGES/kg	N-COMPLIANT TRADE WASTE USAGE CHARGE/ kL	N-COMPLIANCE EXCESS MASS/kg and Ph charges/Kl	N-COMPLIANCE PENALTY f Required)
1	Yes[9]	Yes	Yes	Yes	No	No	No	Yes[11]	No	Yes
2	Yes	Yes	Yes	Yes	Yes	No	No	Yes[11]	No	Yes
2S	Yes	Yes[10]	Yes	Yes[10]	No	Yes	No	No	No	Yes
3	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes

All dischargers of Liquid Trade Waste to Council's sewerage system should be aware that hey are subject to prosecution and imposition of fines under the *Local Government Act 1993* and the *Protection of the Environment (Operations) Act 1997* and Regulations.

In addition to fines, Council may recover costs of damages and fines incurred by Council as a result of an illegal Liquid Trade Waste discharge.

Notes:

[9] Not applicable for discharges exempted in Table 1.

[10] Only applicable if the discharger has a dump point located at their premises which is connected to the sewerage system.

[11] Non-compliance Trade Waste usage charge, if the discharger fails to install or properly maintain appropriate pre-treatment equipment :
Category 1 - $1.95/kL (2017/18$)
Category 2 - $14.50/kL (2017/18$)

3.8 Monitoring

Council may carry out inspections of the premises of all Liquid Trade Waste dischargers and their treatment facilities at least once per annum. Monitoring of the large and industrial dischargers is to be carried out as specified in the approval conditions.

The applicant may be required to monitor the Liquid Trade Waste discharge as a condition of an approval or agreement. They may also be required to pay for any sampling and testing of Liquid Trade Waste undertaken by Council.

For this purpose, an inspection/sampling point, where the Waste can be inspected and sampled, will be specified in the approval and/or agreement. This point will normally be located after the pre-treatment facility. The discharger may need to install a suitable method of flow measurement.

Council may require the discharger to:

- install a permanent primary measurement device
- measure the volume and flow rate using the permanently installed flow measurement system (such as a flow metering system)
- install a flow measurement device on a temporary basis and obtain enough data to determine a basis for assessing the flow rate and volume
- provide a system which allows obtaining a flow weighted composite sample.

Testing of samples is to be undertaken by a NATA-registered or other laboratory recognised by NSW DPI Water to ensure reliable and accurate results. Where the discharger is sampling the effluent, Council may randomly take duplicates to confirm the Waste characteristics.

3.9 Liquid Trade Waste Services Agreement

In addition to its approval under the *Local Government Act*, Council may require certain dischargers, including those who wish to discharge Liquid Trade Waste in large volumes (discharge>20 kL/d) or industrial Waste (Concurrence Classification C discharges) or Classification S into its sewerage system to execute a Liquid Trade Waste services agreement. The agreement will set out the conditions associated with the discharge and execution of the agreement will be a condition of the approval issued by Council (refer to section 3.4). The conditions will be binding on the applicant and the Council. The agreement will be for a period of up to five (5) years. No discharge is to be made to Council's sewerage system until an agreement or an interim agreement has been executed. Provision can be made in the agreement for (in addition to Council's approval conditions):

- additional conditions for discharge of Liquid Trade Waste
- cancellation of the agreement and/or order to cease the discharge if the discharger is found to be in breach of the agreement or the Liquid Trade Waste approval or, in the opinion of Council, the Waste is adversely affecting the sewerage system or the environment
- entry by Council officers to inspect the Liquid Trade Waste collection, treatment, monitoring and disposal systems
- the applicant to notify Council in advance of any changes that may affect the quality and quantity of the Liquid Trade Waste
- the amount of bond/security to be lodged with Council prior to discharging to the Sewerage system.

3.10 Enforcement of Approvals and Agreements

Any person who fails to obtain Council's approval to discharge Liquid Trade Waste into the sewerage system, or fails to comply with the conditions of the approval, may be liable to a penalty as provided under the *Local Government Act 1993* (sections 626 to 628 and 634 to 639). Polluting of any waters by a discharger of Liquid Trade Waste who does not have a Council approval or who fails to comply with the conditions of the approval is an offence under section 120 (1) of the *Protection of the Environment Operations Act 1997*. In addition, under section 222 of this Act, Council may issue a penalty notice (i.e. an on-the spot fine) to such a discharger.

Any person who fails to comply with the terms or conditions of a Liquid Trade Waste Services Agreement (i.e. there is a breach of the agreement) will be required to indemnify the Council against any resulting claims, losses or expenses in accordance with section 8 of the agreement. Suspensions may also apply and may include a notice to cease the discharge.

3.11 Modification and Revocation of Approvals

Council reserves the right to modify or revoke an approval to discharge Liquid Trade Waste to the sewerage system in any of the following circumstances:

- if the approval was obtained by fraud, misrepresentation or concealment of facts
- for any cause arising after the granting of the approval which, had it arisen before the approval was granted, would have caused the council not to have granted the approval
- for failure to comply with a requirement made by or under the Local Government Act 1993 relating to a condition of the approval
- for failure to comply with a condition of the approval.

3.12 Prevention of Waste of Water

Water must be used efficiently and must be recycled where practicable. It is an offence under section 637 of the *Local Government Act 1993* and its Regulation to Waste or misuse water.

Dilution of Trade Waste with water from any non-process source including Council's water supply, bore water, groundwater and/or stormwater as a means of reducing pollutant concentration is therefore strictly prohibited.

3.13 Effluent Improvement Plans

Where the existing Liquid Trade Waste discharged does not meet Council's requirements, the applicant may be required to submit an Effluent Improvement Plan setting out how Council's requirements will be met. The proposed plan must detail the methods/actions proposed to achieve the discharge limits and a timetable for implementation of the proposed actions. Such actions may include more intensive monitoring, improvements to work practices and/or pre-treatment facilities to improve the effluent quality and reliability.

3.14 Due diligence Programs and Contingency Plans

For *Concurrence Classification A,* a discharger is not required to submit either a due diligence program or a contingency plan.

A discharger may be required to submit a due diligence program and a contingency plan for *Concurrence Classification B or Classification S* where it is considered that the discharge may pose a potential threat to the sewerage system. If required, a due diligence program and contingency plan must be submitted to Council within six (6) months and three (3) months respectively of receiving a Liquid Trade Waste approval.

For *Concurrence Classification C,* a discharger may need to provide a due diligence program and contingency plan to Council within six (6) months and three (3) months respectively of receiving a Liquid Trade Waste approval.

It should be noted that:

1. If the discharger has an accredited environmental management system in place, a due diligence program and contingency plan may not be required. However, proof of accreditation must be provided to Council with the application. The EMP may not include all necessary provisions in regard to Trade Waste. In such cases Council may require that a suitable due diligence program and contingency plan be developed and submitted to Council.

2. Where Council considers there is potential risk to the sewerage system from a discharge, it may request a due diligence program and contingency plan to be submitted prior to commencing the discharge.

GLOSSARY

Definitions of terms used, for the purposes of this Code and related Policy.

Word/ Term	Definition
Assumed Concurrence	Council may apply to the Director-General of Trade and Investment, Regional Infrastructure and Services (DTIRIS) for authorisation to assume concurrence for Classification B or Classification S activities. If granted, Council will no longer need to forward such applications for concurrence.
Automatic Assumed Concurrence	Councils have been authorised to assume concurrence for Classification A activities. Such applications may be approved by Council without forwarding the application to for concurrence.
Bilge Water	Minor amounts of water collecting in the bilge of a vessel from spray, rain, seepage, spillage and boat movements. Bilge water may be contaminated with oil, grease, and petroleum products and saltwater.
Biochemical Oxygen Demand (BOD5)	The amount of oxygen utilised by micro-organisms in the process of decomposition of organic material in Wastewater over a period of five days at 20°C. In practical terms, BOD is a measure of biodegradable organic content of the Waste.
Biosolids	Primarily organic solid product produced by sewerage processing. Until such solids are suitable for beneficial use, they are defined as Wastewater solids or sewerage sludge.
Bunding	Secondary containment provided for storage areas, particularly for materials with the propensity to cause environmental damage.
Chemical Oxygen Demand (COD)	A measure of oxygen required to oxidise organic and inorganic matter in Wastewater by a strong chemical oxidant. Wastewaters containing high levels of readily oxidised compounds have a high COD.
Chemical Toilet	Toilet in which Wastes are deposited into a holding tank containing a deodorizing or other chemicals; Wastes are stored and must be pumped out (and chemical recharged) periodically.
Commercial Kitchen/ Caterer	A commercial kitchen is a premise that is typically a stand-alone operation and prepares food for consumption off-site. These types of businesses typically cater to wedding functions, conferences, parties, etc. This definition would not apply to a food processing factory supplying pre-prepared meals to an airline company or similar.

Word/ Term	Definition
Concurrence	Is required before a council may approve an application for the discharge of Liquid Trade Waste (including septic tank and pan Waste) to the sewerage system. It is a requirement under section 90(1) of the Local Government Act and clause 28 of the Local Government (General) Regulation 2005 that council obtain the written concurrence of the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS) prior to approving such Waste to be discharged to the council's sewerage system. Such concurrence request is to be provided to the NSW DPI Water.
Contingency Plan	A set of procedures for responding to an incident that will affect the quality of Liquid Trade Waste discharged to the sewerage system. The plan also encompasses procedures to protect the environment from accidental and unauthorised discharges of Liquid Trade Waste to the stormwater drainage system and leaks and spillages from stored products and chemicals.
Director-General	Director-General means the Director-General of the Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS).
Due Diligence Program	A plan that identifies potential health and safety, environmental or other hazards (e.g. spills, accidents or leaks) and appropriate corrective actions aimed at minimising or preventing the hazards.
Effluent	The Liquid discharged following a Wastewater treatment process.
Effluent Improvement Plan (EIP):	The document required to be submitted by a discharger who is not meeting the acceptance limits for discharge Waste quality set down in Council's approval conditions and/or Liquid Trade Waste agreement. The document sets out how the discharger will meet the acceptance limits for the discharge of Liquid Trade Waste to the sewerage system within the agreed timeframe.
Galley Waste	A Liquid Waste from a kitchen or a food preparation area of a vessel; solid Wastes are excluded.
Heavy Metals	Metals of high atomic weight which in high concentrations can exert a toxic effect and may accumulate in the environment and the food chain. Examples include mercury, chromium, cadmium, arsenic, nickel, lead, zinc.
Housekeeping	Is a general term which covers all Waste minimisation activities connected with the way in which operations within the premises are carried out
Industrial Discharges	Industrial Liquid Trade Waste is defined as Liquid Waste generated by industrial or manufacturing processes.

Word/ Term	Definition
Local Government Regulation	Local Government (General) Regulation 2005 under Local Government Act 1993
Liquid Trade Waste	Liquid Trade Waste means all Liquid Waste other than sewerage of a domestic nature.
Mandatory Concurrence	For the Liquid Waste in Classification C, councils will need to obtain concurrence for each discharger. Such concurrence request is to be provided to DPI Water.
Methylene Blue Active Substances (MBAS)	These are anionic surfactants (see Surfactants definition) and are called MBAS as their presence and concentration is detected by measuring the colour change in a standard solution of methylene blue dye.
Minimal Pre-treatment	Includes sink strainers, basket arrestors for sink and floor Waste, plaster arrestors and fixed or removable screens.

National Framework for Wastewater Source Management	Refer to section 3.2
NSW Framework for Regulation of Sewerage and Trade Waste	Refer to section 3.1
NSW Department of Primary Industries Water	In accordance with the Public Sector Employment and Management (Departments) Order 2011, from 4 April 2011 the NSW Office of Water (NOW) is a separate office within the Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS). All Trade Waste matters/ applications for concurrence and policies for consent need to be forwarded to NOW.
Open Area	Any unroofed process, storage, washing or transport area potentially contaminated with rainwater and substances which may adversely affect the sewerage system or the environment.
Pan	Any moveable receptacle kept in a closet and used for the reception of human Waste.
pH	A measure of acidity or alkalinity of an aqueous solution, expressed as the logarithm of the reciprocal of the hydrogen ion (H+) activity in moles per litre at a given temperature; pH 7 is neutral, below 7 is acidic and above 7 is alkaline.

National Framework for Wastewater Source Management	Refer to section 3.2
Premises	Has the same meaning as defined in the *Local Government Act Dictionary* and includes any of the following: (a) a building of any description or any part of it & the appurtenances to it (b) land, whether built on or not (c) a shed or other structure (d) a tent (e) a swimming pool (f) a ship or vessel of any description (including a houseboat) (g) a van.
Prescribed Pre-treatment Equipment	Standard non-complex equipment used for pre-treatment of Liquid Trade Waste, e.g. a grease arrestor, an oil arrestor/separator, solids arrestor, cooling pit (refer to Table 7 of Liquid Trade Waste Regulation Guidelines, 2009).
Primary Measurement Device	A device such as a gauging pit, weir tank or flume installed in the Liquid Trade Waste discharge line suitable for installation of instrumentation for flow measurement. In cases of commercial flows this can mean a removable section of pipe (in the fresh water supply to the Trade Waste area) and the installation of a check meter.
Septage	Material pumped out from a septic tank during desludging; contains partly decomposed scum, sludge and Liquid.

Septic Tank	**Wastewater treatment device that provides a preliminary form of treatment for Wastewater, comprising sedimentation of settleable solids, flotation of oils and fats, and anaerobic digestion of sludge.**
Septic Tank Effluent	The Liquid discharged from a septic tank after treatment.
Sewerage Management Facility	A human Waste storage facility or a Waste treatment device intended to process sewerage and includes a drain connected to such a facility or device.
Sewerage of Domestic Nature	Includes human faecal matter and urine and Waste water associated with ordinary kitchen, laundry and ablution activities of a household, but does not include Waste in or from a sewerage management facility.
Sewerage System	The network of sewerage collection, transportation, treatment and by-products (effluent and bio-solids) management facilities.

Septic Tank	**Wastewater treatment device that provides a preliminary form of treatment for Wastewater, comprising sedimentation of settleable solids, flotation of oils and fats, and anaerobic digestion of sludge.**
Ship-to-Shore Pump out	Liquid Waste from a vessel that may be considered for disposal to the sewerage system. This includes on-board toilet Wastes, galley Wastes and dry dock cleaning Waste from maintenance activities.
Sullage	Domestic Wastewater excluding toilet Waste.
Surfactants	The key active ingredient of detergents, soaps, emulsifiers, wetting agents and penetrants. Anionic surfactants react with a chemical called methylene blue to form a blue-chloroform-soluble complex; the intensity of colour is proportional to concentration.
Suspended Solids (SS)	The insoluble solid matter suspended in Wastewater that can be separated by laboratory filtration and is retained on a filter. Previously also referred to as non-filterable residue (NFR).
Total Dissolved Solids (TDS)	The total amount of dissolved material in the water.
Waste Minimisation	Procedures & processes implemented by industry and business to modify, change, alter or substitute work practices and products that will result in a reduction in the volume and/or strength of Waste discharged to sewer.

Application for Discharge of Liquid Trade Waste Approval

Form A

This application form is for businesses that intend to discharge certain low risk (Concurrence Classification A) liquid trade wastes to the Council sewerage system. Please include all details as requested. When complete, return this form to Council, including attachments.

1. Business Activity

Please indicate the nature of your business. Please refer to the accompanying list "Liquid Trade Waste – business activity classifications". Include more than one activity if appropriate.

#	Activity	Number of Seats/ Beds (if applicable)

Please indicate if your premises contain the following:

Item	Yes	No	Number
Potato peeling appliances			
Dishwasher/ s			

2. Normal hours of business

Day	Start	Finish
Monday to Friday		
Saturday		
Sunday		

3. Description of flow

Maximum rate of discharge to sewer	kL/h or L/s
Maximum daily discharge to sewer	kL

4. Water supply meter

Is the supply of water to this business metered? Yes ☐ No ☐

If yes, what is the Meter Number? _____

5. Existing/ proposed pre-treatment equipment

Type	Tick	Size	Flow rate
1 Grease arrestor			
2 Dry basket arrestor with fixed screens			
3 Sink screen/ strainer			
4 Fixed or removable mesh screen			
5 Coalescing plate interceptor or separator			
6 Vertical gravity separator			
7 Hydrocyclone separation system			
8 Cooling pit			
9 Balancing, averaging, neutralising pit/ tank			
10 General purpose pit			
11 Solids settlement pit/ silt arrestor			
12 Baffled settlement pit			
13 Lint screen			
14 Plaster arrestor			

6. Proposed cleaning schedule

_____

_____

_____

7. Names of cleaning contractors

_____

_____

_____

8. Location of sampling point (provide a site plan)

_____

_____

_____

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Application No:	Information Complete: Y N

Application for Discharge of Liquid Trade Waste Approval

Form B and C

This application form is for businesses that intend to discharge certain medium risk (Concurrence Classification B) liquid trade wastes to the Council sewerage system. Please include all details as requested. When complete, return this form to Council, including attachments.

1. Business Activity

Please indicate the nature of your business. Please refer to the accompanying list "Liquid Trade Waste – business activity classifications'. Include more than one activity if appropriate.

#	Activity	Number of Seats/Beds (if applicable)

Please indicate if your premises contain the following:

Item	Yes	No	Number
Potato peeling appliances			
Dishwasher/ s			

2. Normal hours of business

Day	Start	Finish
Monday to Friday		
Saturday		
Sunday		

3. Description of flow

Large dischargers are required to provide a balancing tank to even out the load on the sewerage treatment works.

Maximum rate of discharge to sewer	kL/h or L/s	
Maximum daily discharge to sewer	kL	
Average daily discharge to sewer	kL	
Peak periods of discharge during the day:		
Type of discharge: - Batch flow - Intermittent flow - Continuous flow	 Yes Yes Yes	 No No No

Are there special circumstances applicable to the discharge? Yes No

If yes, please identify:

Circumstance	Tick	Details
Seasonal discharge		
Large difference between average and maximum daily load		
Variations to flow which avoid peak domestic flow		
Retention of discharges for extended periods		

4. Water supply source

Source	Tick
Bore/ ground water	
On site dam	
Watercourse	
Recycled/ re-use water	
Town water (see below)	

Is the supply of water to this business metered? Yes No

If yes, what is the Meter Number? _____

5. Flow measurement

Will the discharge of liquid trade waste to the sewer be measured? Yes No

If yes, provide details/ plans of the method and location of flow measurement.

_____

_____

_____

_____

_____

6. Open areas

Does the proposed installation contain open areas that will drain to the sewerage system?
Yes No

If yes, please provide details (including stormwater drainage plans for the site). See Note 2

7. Description of waste

Please list all expected pollutants including substances contained in wash down detergents, boiler and cooling water and other sources. Include expected maximum and average concentrations of pollutants and sample analysis results of the proposed waste. See Note 1 for more information.

Parameter	Acceptance limit (mg/L)	Average (mg/L	Maximum (mg/L)
BOD5	300		
Suspended solids	300		
COD	Normally<3 x BOD5		
Total dissolved solids	<4000		
Temperature	<38°C		
pH	7.0-9.0		
Oil and Grease	100		
Detergents	Must be biodegradable 50mg/L as MBAS		
Colour	No visible colour when waste diluted to equivalent of domestic sewerage		
Radioactive substances	Must comply with Radiation Control Act 1990		

Inorganic Compounds

Ammonia (as N)	50		
Boron	25		
Bromine	5		
Chlorine	10		
Cyanide	5		
Fluoride	20		
Nitrogen (TKN)	100		
Phosphorous	20		
Sulphate (SO4)	100		
Sulphide (S)	1		
Sulphite (SO3)	15		

Organic Compounds

Compound	Acceptable limit (mg/L)	Average (mg/L)	Maximum (mg/L)
Formaldehyde #	50		
Phenolic compounds (except pentachlorophenol)	10		
Petroleum hydrocarbons (non- flammable)	30		
Pesticides (general)	0.1		
Pesticides (organophosphates)	Nil		
Pesticides (organochlorines)	Nil		

Parameter	Acceptable Limit (mg/L)	Allowed Daily Mass Limit (gm/d)	Average (mg/L)	Maximum (mg/L)
Aluminium	100	-		
Arsenic	1	2		
Cadmium	2	6		
Chromium *	5	15		
Cobalt	5	15		
Copper	5	15		
Iron	100	-		
Lead	2	6		

Parameter	Acceptable Limit (mg/L)	Allowed Daily Mass Limit (gm/d)	Average (mg/L)	Maximum (mg/L)
Manganese	10	30		
Mercury	0.02	0.05		
Molybdenum	10	30		
Nickel	5	15		
Selenium	5	15		
Silver^	2	6		
Tin	5	15		
Zinc	5	15		

Acceptance of chemical toilet waste which contains formaldehyde will be assessed on the available dilution in the sewerage system.

- Where hexavalent chromium (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 to the sewer. Discharge of hexavalent chromium (Cr^{6+}) from chromate compounds used as corrosion inhibitors in cooling towers is **not permitted.**
- ^ This limit is applicable for large dischargers. The concentration of silver in the photo processing waste where a balancing tank is provided is not to exceed 5mg/L.

8. Location of sampling point (provide a site plan).

_____

_____

_____

_____

9. Existing/ proposed pre-treatment equipment

Type	Tick	Size	Flow rate
1 Grease arrestor			
2 Dry basket arrestor with fixed screens			
3 Sink screen/ strainer			
4 Fixed or removable mesh screen			
5 Coalescing plate interceptor or separator			
6 Vertical gravity separator			

Type	Tick	Size	Flow rate
7 Hydrocyclone separation system			
8 Cooling pit			
9 Balancing, averaging, neutralising pit/ tank			
10 General purpose pit			
11 Solids settlement pit/ silt arrestor			
12 Baffled settlement pit			
13 Lint screen			
14 Plaster arrestor			
15 Other (describe)			

See Note 3 for detailed information required.

10.Proposed cleaning schedule

Please provide details of the proposed cleaning schedule of the designated pre-treatment equipment and names of the licenced contractor who will perform the work.

Pre-treatment Equipment	Frequency (weeks)	Contractor	Licence

11.Chemical details

Please provide details of any chemicals that will be used in the pre-treatment process. Attach all Safety Data Sheets for chemicals to be used and are likely to be contained in the waste effluent.

Substance	Qty	Storage Liquid Solid	Location	Bunding Yes No

12. Future expansion

Are there any plans for future expansion of the activities that generate liquid trade waste? Yes No

13.Supporting documentation

Please attach a copy of any relevant supporting documentation

Item	Attached	Not Relevant
Environmental impact statement		
Consultant's report		
DEC (EPA) considerations/ restrictions		
Other (please specify)		

Notes:

1. Sample analysis tests must be conducted by a NATA approved laboratory with accreditation for analysis of the nominated pollutants. Details and supporting documentation of data collection method must be attached.

   Acceptable means of sample analysis data collection are;

   - collection of the proposed waste from a trial pre-treatment plant
   - stand -alone pre-treatment equipment manufacturer's waste quality expectations
   - configured pre-treatment process consultant's calculations based on experience of a similar installation.

2. Stormwater is prohibited from being discharged into Council's sewerage system. The capacity for such flows is not provided in the sewerage system. Therefore, Council does not generally accept the discharge of stormwater into the sewerage system. The discharge of limited first flush water from liquid trade waste generating areas will be considered where roofing cannot be provided because of safety or other important considerations.

   Information required for Council to consider the discharge of first flush water includes;

   - Reasons why the area cannot be fully or partially roofed and bunded to exclude stormwater
   - The dimensions and a plan of the area under consideration
   - The estimated volume of the stormwater discharge
   - Information on rain gauging
   - Information on a first flush system if proposed
   - Measures proposed for diverting stormwater away from the liquid trade waste generating area
   - A report on other stormwater management options considered and why they are not feasible.

3. This application must be accompanied by two copies of plans showing;
   - Details and location of all processes, tanks, pits and apparatus associated with the generation of trade waste
   - Details of the proposed liquid trade waste treatment process
   - Details of pipes, floor drainage used to convey the effluent
   - A full schematic layout of the proposed/ existing waste pre-treatment facilities for liquid trade waste prior to discharge to the sewer system
   - Flow diagram and hydraulic profile of proposed treatment apparatus
   - Capacity/ dimensions, material of construction and lining, operation and maintenance of all pits, tanks dosing systems, pumps etc.
   - Details of the integrity of the pH correction system (diversion system, recording, alarm – location, failsafe, tamper proof).

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Application No:	Information Complete: Y N

Application for Discharge of Liquid Trade Waste Approval

Form S

This application form is for businesses that intend to discharge Concurrence Classification S liquid trade wastes to the sewerage system. Please include all details as requested. When completed, return this form to Council, including attachments.

1. Type of Waste

Please indicate the nature of your waste.

Septic Tank Waste	
Effluent	Septage
Pan content waste	
Caravan park/ Mobile homes (RV)	Portable chemical toilet (building / event sites/ bus/ train)
Pump-out from boat/ marinas	
Liquid galley waste	Toilet waste
Dock cleaning waste	

2. Normal Hours of Business

Please indicate the hours of day during which discharge will normally take place.

Day	Start	Finish
Monday to Friday		
Saturday		
Sunday		

3. Odour Inhibiting and Other Chemicals Used (if any)

Please indicate the types of chemicals that may be added to the waste prior to discharge, include Safety Data Sheets for each chemical.

Name of chemical	Dose rate

4. Proposed Method of Waste volume measurement

Please indicate how the discharge volume will be measured and provide details

Flow Meter/ Level indicator	Known tank/ container capacity
Pump out rate	Other

_____

_____

_____

_____

5. Proposed method of discharge

Please indicate how and where the waste will be discharged, include site plans and drawings.

_____

_____

_____

_____

6. Open areas

Please attach the stormwater drainage plan for the site.

Stormwater is prohibited from being discharged into Council's sewerage system. The capacity for such flows is not provided for in the sewerage system. Council does not generally accept the discharge of stormwater to the sewerage system.

Does the proposed installation contain open areas that will drain to the sewerage system? Yes No

If yes, please provide details, including how stormwater ingress will be prevented:

_____

_____

_____

_____

7. Odour control measures

_____

_____

_____

_____

8. Measures to prevent grease trap waste being mixed with septic tank waste

Grease trap waste is not permitted to be discharged to the sewerage system.

Please indicate how grease trap waste will not be mixed with septic tank waste. Include measures used to clean any tanker that will be used to transport both types of waste. By signing the application form, the applicant acknowledges that grease trap waste will not be mixed with septic tank waste.

_____

_____

_____

_____

9. Security arrangements at proposed disposal point

What measures will be in place to prevent unauthorised discharge of waste to the sewerage system?

_____

_____

_____

_____

10.For boat/ marina facility (if applicable)

Bilge water is not permitted to be discharged to the sewerage system.

Please indicate the number of vessels that may utilise the facility:

Commercial: Private:

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Application No:	Information complete: Yes No

Application for Discharge of Liquid Trade Waste Approval

Form C3

This application form is for businesses involved in mechanical repair processes (and other services related to motorised equipment processes) that intend to discharge liquid trade wastes to the sewerage system. In the list below, tick the business type or processes that best describe what your business does. Please include all details as requested. When completed, attach this form to the Application Form (Form C1) and return the forms to Council, including any other attachments.

BUSINESS TYPE

- Airport or Aerodrome terminal
- Bus/ Coach depot
- Car detailer
- Car/ Truck dealership service centre
- Car importation premises (de-waxing only)
- Construction equipment maintenance or servicing (i.e. earthmoving equipment and/ or cranes)
- Agricultural equipment maintenance or servicing
- Factory premises
- Fleet vehicle operations
- Forklift maintenance and servicing
- Garbage truck washing, maintenance or servicing
- Lawnmower or other small engine repairer
- Motorbike mechanical repairer, maintenance or servicing
- Motor boat mechanical repairer, maintenance or servicing
- Motor wrecker
- Service station
- Specialist services
- Stand-alone mechanical workshop
- Train washing facility
- Transport depot
- Car or Truck wash facility
- Other, please specify

PROCESSES

Note to Council: those processes in italics and marked with an asterisk* have automatic assumed Concurrence Classification A.

Mechanical workshop

- ** Parts washing with water*
- ** Floor washing*
- Draining and flushing of radiator coolant **(Not permitted for discharge)**
- Parts washing with solvents **(Not permitted for discharge)**
- Radiator repairs

- Automobile dismantling (i.e. motor wrecker)
- Cleaning of engine blocks and engine heads in chemical baths
- Engine/ gearbox re-conditioner (sent off site)
- Engine/ gearbox re-conditioner (carried out on site)

Repairing car bodies

- Panel repair and/ or Panel beating
- Wet rubbing
- Spray painting

Washing and detailing

- Tunnel type (external body only)
- Wand type (external body only)
- Washing by hand (external body only)
- Degreasing of engine and washing
- Internal washing of meat vans or truck underbodies
- External truck washing
- Internal washing of tankers
- Forecourt washing (service stations)
- Open area washing (considered only under special circumstances. Applicant must supply reasons why roofing is not possible and must include the details of first flush system).

ASSOCIATED ACTIVITIES/ BUSINESSES

Some premises have associated processes generating liquid trade waste. In addition to the above, does your premises, have any of the following processes?

- Restaurant (number of seats?)
- Take-away food bar (number of seats?)
- Service station forecourt food caravan(s)
- Boiler blowdown (steam supply for internal washing of tankers)
- Chemical toilet disposal (for intercity coaches/ buses)
- Other trade wastewater process, please specify

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Application No:	Information complete: Yes No