



LITHGOW CITY COUNCIL

Policy 11.4

DISCHARGE OF LIQUID TRADE WASTE TO THE SEWERAGE
SYSTEM

Version 1

11.4 DISCHARGE OF TRADE WASTE INTO THE SEWERAGE SYSTEM

PURPOSE OF THIS POLICY

Sewerage systems are generally designed to cater for waste from domestic sources that are essentially of predictable strength and quality. Council **may** accept trade waste into its sewerage system as a **service** to a business and/or industry.

Liquid trade wastes may exert much greater demands on sewerage systems than domestic sewage 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 management include:

- Grease, oil, solid material - if not removed on-site, can cause blockages in the sewerage system and result in overflows of untreated sewage to the environment.
- Strong waste may cause odour problems and corrosion of sewer mains, pumping stations and sewage treatment facilities.

This Policy is concerned with the approvals process for liquid trade wastes discharged into Council's sewerage system and the levying of appropriate sewerage and liquid trade waste fees and charges. It has been developed to ensure the proper control of liquid trade waste discharged to the sewerage system and hence the protection of public health, worker safety, the environment and Council's sewerage infrastructure. This Policy promotes waste minimisation and water conservation.

This Policy excludes management of waste from a sewerage management facility, which is covered by a separate Policy.

A person wishing to discharge liquid trade waste into the sewerage system must, under Section 68 of the Local Government Act 1993, obtain the prior approval from Council. Discharging liquid trade waste without an approval is an offence under Section 626 the Act.

The procedure for approval is governed by Chapter 7 of the Local Government Act 1993, and is subject to the Local Government (General) Regulation 2005.

Under Section 90 of the Local Government Act 1993 and Clause 28 of the Local Government (General) Regulation 2005, Council may grant approval only if the Director-General of the Department of Energy Utilities and Sustainability (DEUS) has:

- concurred with the approval; or
- given Council notice that concurrence may be assumed with such qualifications and conditions that may be specified in the notice.

I. GLOSSARY

ASSUMED CONCURRENCE

Council may apply to the Department of Energy, Utilities and Sustainability (DEUS) for delegation to assume concurrence for Classification B or Classification S activities. If granted, Council will no longer need to forward such applications to the Department of Energy Utilities and Sustainability for concurrence.

AUTOMATIC ASSUMED CONCURRENCE

Councils have been authorised to assume the Department of Energy, Utilities and Sustainability's concurrence for Classification A activities. Such applications may be approved by Council without forwarding the application to the Department of Energy, Utilities and Sustainability for concurrence.

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 (5) days at a temperature of twenty degrees Celsius (20°C). In practical terms, BOD₅ is the measure of biodegradable organic content of the waste.

BIOSOLIDS

Primarily organic solid product produced by sewage processing. Until such solids are suitable for beneficial use, they are defined as wastewater solids or sewage sludge.

BUNDING

Secondary containment provided for storage areas, particularly for materials with the propensity to cause environmental damage.

CHEMICAL OXYGEN DEMAND (COD)

This is 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.

COMMERCIAL KITCHEN/CATERER

For the purpose of this Policy, a commercial kitchen is a premises 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.

COMPLIANT DISCHARGER

For the purpose of this Policy, a compliant discharger is defined as a discharger of liquid trade waste who has adequately completed an Application Form, as well as installed appropriate prescribed pre-treatment equipment which is required for that business activity (see Prescribed Pre-Treatment definition).

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.

DEPARTMENT OF ENERGY, UTILITIES AND SUSTAINABILITY CONCURRENCE

The Department of Energy, Utilities and Sustainability concurrence is required before Council may approve an application for the discharge of liquid trade waste or septic tank and pan waste to the sewerage system. It is a requirement under Section 90(1) of the Local Government Act 1993 that Council obtain the written concurrence of the Director-General of the Department of Energy, Utilities and Sustainability prior to approving such waste to be discharged to the council's sewerage system.

DIRECTOR-GENERAL

Director-General means the Director-General, Department of Energy, Utilities and Sustainability.

DUE DILIGENCE PROGRAMME

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 a discharger will meet the acceptance limits for the discharge of liquid trade waste to the sewerage system within a given timeframe.

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 and 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. For the purposes of this Policy, most of the processes defined in Concurrence Classification C are industrial discharges.

LARGE FAST FOOD OUTLET

A food business that typically discharges more than 5 kilolitres per day. Premises of this nature include KFC, McDonalds, Red Rooster, Pizza Hut, Hungry Jack's and Burger King.

LOCAL GOVERNMENT REGULATION

Local Government (General) Regulation 2005 under the Local Government Act 1993.

LIQUID TRADE WASTE

The liquid waste means all liquid waste other than sewage of a domestic nature.

MANDATORY CONCURRENCE

For the liquid waste in Concurrence Classification C, Council will need to obtain concurrence from the Department of Energy, Utilities and Sustainability on each occasion.

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

For the purpose of this Policy includes sink strainers, dry basket arrestors, plaster arrestors and fixed or removable screens.

NON-COMPLIANT DISCHARGER

For the purpose of this Policy, a non-compliant discharger is defined as a discharger of liquid trade waste who has not adequately completed an Application Form (including not provided Council with requested information regarding the trade waste business), as well as not installing appropriate prescribed pre-treatment equipment which is required for that business activity, or operating and maintaining prescribed pre-treatment equipment (see Prescribed Pre-Treatment definition).

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.

pH

This is a measure of acidity or alkalinity of an aqueous solution, expressed as a logarithm of the reciprocal of the hydrogen ion (H^+) activity in moles per litre at a given temperature. pH 7 is neutral, less than 7 is acidic and greater than 7 is alkaline.

PREMISES

Has the same meaning as defined in the Local Government Act 1993 Dictionary and includes any of the following:

- a building of any description or any part of it and the appurtenances to it;
- land, whether built on or not;
- a shed or other structure;
- a tent;
- a swimming pool;
- a ship or vessel of any description (including a houseboat); or
- a van.

PRESCRIBED PRE-TREATMENT EQUIPMENT

Is defined as 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 Management Guidelines*, Department of Energy, Utilities and Sustainability, 2005).

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.

SEWAGE MANAGEMENT FACILITY

A human waste storage facility of a waste treatment device intended to process sewage and includes a drain connected to such a facility or device.

SEWAGE OF A DOMESTIC NATURE

The waterborne waste derived from human origin, comprising faecal matter, urine and liquid household wastes from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings, but excludes waste in or from a sewage management facility.

SEWERAGE SYSTEM

The network of sewage collection, transportation, treatment and by-products (effluent and biosolids) management facilities.

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.

SURGE CONTROL DEVICE

A device that is installed in a grease arrestor chamber and may improve the arrestor performance by stabilising hydraulic surges.

SUSPENDED SOLIDS

The insoluble solid matter suspended in wastewater that can be separated by laboratory filtration and is retained on a filter. Previously referred to as non-filterable residue (NFR).

TOTAL DISSOLVED SOLIDS

The dissolved salts in wastewater.

WASTE MINIMISATION

Procedures and processes implemented by industry and business to modify, change, alter or substitute work practices and products that will result in a reduction in the volume and/or strength of waste discharged to sewer.

II. WHAT IS LIQUID TRADE WASTE

For the purpose of this policy:

Liquid trade waste means all liquid waste other than sewage of a domestic nature.

Liquid trade waste discharges to the sewerage system *include* liquid wastes discharged from:

- business/commercial premises (eg 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 (eg mobile carpet cleaner);
- any commercial activities carried out at a residential premises; and
- saleyards, racecourses and from stables and kennels not associated with domestic households.

Every town has a wide range of liquid trade waste discharger – examples are shown in Section 3.4 of this Policy.

Liquid trade waste excludes:

- toilet, hand wash basin, shower and bath wastes derived from all the premises and activities mentioned above;
- wastewater from residential toilets, kitchens, bathrooms or laundries (ie domestic sewage);
- common use (non-residential) kitchen and laundry facilities in a caravan park; and
- residential swimming pool backwash.

This Policy excludes the acceptance of waste from a sewage management facility into the sewerage system, eg septic tank waste, waste from marine pump-out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system.

While these wastes are defined as trade waste, specific procedures need to be applied to their management as the waste is often transported or pumped out from its source. Accordingly, the management of the wastes are addressed in a separate Policy.

III. OBJECTIVES

Council's objectives in respect of liquid trade waste are:

- To manage discharge into the sewerage system;
- To provide an environmentally responsible liquid waste management service to the non-residential sector;
- To protect public health;
- To protect the health and safety of Council's employees;
- To assist Council to meet its statutory obligations;
- To safeguard the sewerage system against damage, blockage or surcharging;
- To protect Council's assets (sewerage systems, sewage treatment plants) from potentially harmful substances;
- To protect the environment by excluding non-biodegradable, inhibitory or toxic substances that could:-
 - a) cause the treatment process to fail;
 - b) render effluent of sludge unacceptable for reuse or disposal; and
 - c) cause any other detriment to the environment;
- To apply a charging structure to commerce and industry which:-
 - a) recovers the cost of services and treatment;
 - b) recovers the cost of damage to the sewerage system;
 - c) encourages industry to comply with Council requirements;
 - d) encourages waste minimisation; and
 - e) encourages industrial development;
- To encourage waste minimisation and cleaner production in commercial and industrial sectors;
- To promote water conservation;
- To ensure that reuse of the sewage treatment works biosolids is feasible;
- To ensure compliance of liquid trade waste discharges with the approved conditions;

- Ensure commercial provision of services and cost recovery through appropriate sewerage and liquid trade waste fees and charges; and
- To obtain appropriate and accurate information regarding volume, composition, concentration, mass loads and periodicity of liquid trade waste discharges to the sewerage systems and treatment plant.

This Liquid Trade Waste Policy has been adopted by Council to achieve Council's objectives and to identify Council's requirements for industry and the community.

IV. SCOPE OF THIS POLICY

This policy comprises three (3) parts:

- Part 1 specifies the circumstances in which a person is exempt from the necessity to obtain an approval to discharge liquid trade waste to the sewerage system;
- Part 2 specifies the criteria which Council will take into consideration in determining whether to give or refuse a liquid trade waste approval; and
- Part 3 specifies other matters relating to liquid trade waste approvals, including application procedures, liquid trade waste discharge categories, liquid trade waste services agreements, monitoring of liquid trade waste discharges, liquid trade waste fees and charges and contaminated stormwater discharges from open areas.

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

This table lists commercial business activities that the Director-General of Department of Energy, Utilities and Sustainability has provided an exemption from the requirement to obtain Council's 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.

VI. TABLE 1 – BUSINESS ACTIVITIES EXEMPT FROM OBTAINING APPROVAL TO DISCHARGE LIQUID TRADE WASTE TO COUNCIL'S SEWERAGE SYSTEM

PROCESS	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).
Delicatessen – no hot food prepared	Sink strainers in food preparation areas. Housekeeping practices (see Note 4).

Dental surgery (no x-ray)	Amalgam trap and segregation of waste amalgam (to be disposed of with rest of solid waste). If plaster casts made, plaster arrestor required.
Dental 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). 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.
Hairdresser	Floor waste basket and sink strainer required (where available).
Jewellery shop Miniplater Ultrasonic washing Precious stone cutting	Miniplater vessel to contain no more than 1.5 litres of precious metal solution. Nil. If less than 1,000 litres per day – plaster arrestor required. If greater than 1,000 litres per day – general purpose pit required.
PROCESS	REQUIREMENTS
Mixed business (minimal hot food)	Floor waste basket and sink strainer required (see Note 3). Housekeeping practices (see Note 4).
Mobile Cleaning Units Carpet Cleaning Garbage Bin Washing	20 micron filtration system fitted to a mobile unit. 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).
Nutshop	Floor waste basket and sink strainer required (see Note 3).
Optical Service - retail	Solids settlement tank/pit required.
Petshop – 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, 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 dry basket arrestor.
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 until is not permitted.

VII.PART 2 – CRITERIA FOR APPROVAL TO DISCHARGE LIQUID TRADE WASTE INTO COUNCIL SEWERAGE SYSTEM

2.1 FACTORS FOR CONSIDERATION

Council's decision to accept liquid trade waste into the sewerage system will be based on the discharge meeting Council's requirements. When determining an application to discharge liquid trade waste into the sewerage system, Council will consider the following factors;

- The potential for liquid trade waste discharge to impact on public health;
- The possible impacts the discharge may pose to the environment (land, air, water, noise or nuisance factors);
- The potential impacts of the discharge on the health and safety of Council's employees;
- The possible impact of the discharge on Council's sewerage infrastructure or sewage 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 discharges;
- The impact the liquid trade waste will have on the ability of the sewerage scheme to meet the Department of Environment and Conservation licence requirements;
- The potential impacts of the discharge on the quality of, and the management practices for, effluent biosolids produced from the sewage treatment processes;
- Compliance of the proposed liquid trade waste discharge with guideline limits in the Policy (*);
- 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 programmes; and
- The adequacy of the proposed due diligence programme and contingency plan, where required.

(*) Note: The quality of trade waste from some low risk commercial activities in Classification A will exceed guideline limits on 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 (refer to Table 1 of this Policy).

2.2 DISCHARGE QUALITY

Council has guideline limits for the acceptance of discharges, as set out in Table 2 of this Policy. Council may vary the guideline limits for a particular sewage treatment works. Where the guidelines 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 programme, or other conditions being implemented.

2.3 PROHIBITED SUBSTANCES

Some substances are not suitable for discharge to the sewerage system. Table 3 of this Policy sets out those substances which must not be discharged into the sewerage system. Council may not grant approval for the disposal of these substances into the sewerage system unless the discharge is specifically approved under Section 68 of the Local Government Act 1993.

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 into the sewerage system at some liquid trade waste premises. The discharge of limited quantities of first flush water from such areas will be considered where roofing cannot be provided because of safety or other important considerations.

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;
- The estimated volume of the stormwater discharge;
- Information on rain gauging;
- 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 first ten (10) millimetres of storm run off);
- Measures proposed for diverting stormwater away from the liquid trade waste generating area; and
- Report on other stormwater management options considered and why they are not feasible.

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. Existing installations in hospitals and nursing homes may be permitted, provided that wastewater is discharged through an adequately sized grease arrester. For existing premises, a

food waste disposal charge will be levied based on the number of beds in the hospital or nursing home (refer to section 3.5.6).

If the hospital or nursing home kitchen is refurbished, the food waste disposal unit must be removed.

2.6 DEVICES THAT MACERATE OR PULVERISE WASTE

Macerators and any other similar devices that are used for pulverizing of solid waste are not authorised to connect to Council's sewerage system (refer to MP52-2002 (August) – Manual of Authorization Procedures for Plumbing and Drainage Products, Standards Australia). Solid waste includes, but is not limited to, sanitary napkins, placenta, surgical waste, disposable nappy, mace bedpan and urine containers.

Therefore Council will not accept any discharges from such devices into its sewerage system.

2.7 USE OF ADDITIVES IN PRETREATMENT SYSTEMS

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

VIII. TABLE 2 - ACCEPTANCE LIMITS FOR DISCHARGE OF LIQUID TRADE WASTE TO THE SEWERAGE SYSTEM

The nature and levels of the components and characteristics of liquid trade waste shall comply with the following specifications at the point of discharge to the sewerage system:-

PHYSICAL CHARACTERISTICS

- a) Temperature - not to exceed thirty eight degrees Celsius (38°C)
- b) Volume and Flow Rate - to depend upon available hydraulic capacity of the sewerage transportation system and the capacity of the receiving sewage treatment plant, as determined by the General Manager. Large dischargers are required to provide a balancing tank to even out the load on the sewerage treatment plant.
- c) Colour - no visible colour when the waste is diluted to the equivalent dilution afforded by domestic sewage flow.
- d) Odour - to be subject to such controls as may be deemed necessary by the Council and specified in the Agreement. Discharge is not to be detectable in 1% dilution or cause an odour problem in Council's reticulation.

CHEMICAL CHARACTERISTICS

- a) pH - not to be less than 7.0, or greater than 9.0.
- b) Organic Strength - five (5) day biochemical oxygen demand (BOD5) concentration not to exceed 300 mg/L unless the specific approval of Council has been obtained and the waste is discharged under such conditions as may be specified in the Agreement.
- c) Total Suspended Solids (TSS) - concentration not to exceed 300 mg/L unless the specific approval of the Council has been obtained and the waste discharged under such conditions as may be specified in the Agreement.

- d) Total Dissolved Solids (TDS) - concentration not to exceed 4,000 mg/L, however, acceptance limit may be reduced depending on available effluent disposal options and will be subject to a mass load limit.
- e) Total Oil and Grease - no visible floating oil or grease. Total oil and grease not to exceed 100 mg/L if the volume of the discharge does not exceed 10% of the design capacity of the treatment plant, and 50 mg/L if the volume is greater than 10%.
- f) 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.
- g) Radioactive Substances - the discharge must comply with the Radiation Control Act 1990.

ELEMENTS AND COMPOUNDS

a) Inorganic Compounds

Maximum allowable concentrations (mg/L) are as follows:

Ammonia (as N)	50
Boron	25
Bromine	5
Chlorine	10
Cyanide	5
Fluoride	20
Nitrogen (Total Kjeldahl)	100
Phosphorus (Total)	20
Sulphate (as SO ₄)	100
Sulphide (as S)	1
Sulphite (as SO ₃)	15

b) Organic Compounds

Maximum allowable concentrations (mg/L) are as follows:

Benzene	0.1
Benzene, Toluene, Ethyl benzene, Xylene (BTEX)	1
Formaldehyde	50
Phenolic compounds (except pentachlorophenol)	10
Petroleum hydrocarbons (non flammable)	30
Pesticides:	
General	0.1
Organophosphorus	Nil
Organochlorine	Nil
Polynuclear Aromatic Hydrocarbons (PAHs)	5

c) Metals

Maximum allowable concentrations (mg/L) are as follows:

	Maximum concentration	Allowed daily mass limit (g/d)
Aluminium	100	Not Applicable
Arsenic	1	2
Cadmium	2	6
Chromium *	5	15
Cobalt	5	15

Copper	5	15
Iron	100	Not Applicable
Lead	2	6
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

Total metals (excluding Aluminium, Iron, Manganese and Molybdenum) are to be less than 30 mg/L and are subject to total mass loading requirements.

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 into the sewer. Discharge of hexavalent chromium (Cr^{6+}) from chromate compounds used as corrosion inhibitors in cooling towers is not permitted.

The concentration limit for Silver is applicable to large dischargers, and in photoprocessing waste where a balance tank is provided, the concentration limit is not to exceed 5 mg/L

IX. TABLE 3 - SUBSTANCES PROHIBITED FROM BEING DISCHARGED INTO COUNCIL'S SEWERAGE SYSTEM

- Organochlorine weedicides, fungicides, pesticides, herbicides and substances of a similar nature and/or wastes arising from the preparation of these substances;
- Organophosphorus pesticides and/or wastes arising from the preparation of these substances;
- Any substance liable to produce noxious or poisonous vapours in the sewerage system;
- Organic solvents and mineral oil;
- Any flammable or explosive substance;
- Discharges from 'Bulk Fuel Depots';
- Chromate from cooling towers;
- Natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions;
- Rain, surface, seepage or subsoil water, unless specifically permitted;
- Solid matter'
- Any substance assessed as not suitable to be discharged into the sewerage system;
- Waste liquids that contain pollutants in concentrations which inhibit the sewage treatment process – refer to *Guidelines for Sewerage Systems: Acceptance of Trade Waste (Industrial Waste)* (ARMCANZ/ANZECC, 1994); and
- Any other substances listed in a relevant Regulation.

X. PART 3 – MATTERS RELATING TO TRADE WASTE APPROVALS

3.1 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, and contact telephone number;
- Address of the business/industry where discharge to the sewerage system will occur;
- Name of the contact person for the premises and telephone contact for the business/industry;
- Type of process/activity generating the liquid trade waste;
- Normal hours of operation;
- Rate of discharge, including
 - a) the average per day, maximum per day and per hour, and
 - b) hours of the day during which discharge will take place;
- Characteristics of wastes, including
 - a) nature of the source, and
 - b) 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 – supply Material Safety Data Sheets;
- Details of any proposed pre-treatment facilities, location and site plan. Details should include:
 - a) pre-treatment process details,
 - b) internal wastewater drainage,
 - c) pump size,
 - d) rising main size, length and profile,
 - e) system operational characteristics,
 - f) operational procedures,
 - g) provision for sampling and flow measurement, where required; and
 - h) 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 the prevention of stormwater egress into the sewerage system;
- Manifest showing the 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 to be discharged to the sewerage system;
- Any relevant environmental impact assessments; and
- Any additional information requested by Council.

3.2 APPROVAL OF APPLICATIONS

Council may, under Section 86 of the Local Government Act 1993, request an applicant to provide more information to enable Council to determine the application.

Where an application is approved, Council will notify the applicant as soon as practicable for the approval, and any conditions of the approval. The duration of the approval will be as stated in the approval. In cases where Council requires a large discharger to enter into a liquid trade waste agreement (refer to Section 3.7), Council will issue a deferred commencement approval under Section 95 of the Local Government Act 1993, requesting the discharger to do so within the time specified in Council's letter. In such case, 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 1993.

If an application is refused, Council will notify the Applicant for the grounds of refusal.

An approval to discharge liquid trade waste to Council's sewer is not transferable. A new application must be lodged and a new approval 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.

3.3 CONCURRENCE OF THE DEPARTMENT OF ENERGY, UTILITIES AND SUSTAINABILITY

If Council supports an application and has a notice stating that concurrence of the Director-General, Department of Energy, Utilities and Sustainability can be assumed for the waste relevant to the application, Council will approve the application. Otherwise, Council will seek concurrence from the Department of Energy, Utilities and Sustainability in accordance with the requirements of Section 90(1) the Local Government Act 1993.

Liquid trade waste discharges are divided into three (3) classifications for the purposes of the concurrence process.

Concurrence Classification A – liquid trade waste discharges for which Council may automatically assume concurrence to the approval subject to certain requirements (as indicated in Part 1 of this Policy).

Concurrence Classification B – liquid trade waste discharges whereby Council may apply to the Director-General, Department of Energy, Utilities and Sustainability for assumed concurrence to the approval subject to certain requirements; and

Concurrence Classification C – all other liquid trade waste discharges that do not fall within Concurrence Classification A or Concurrence Classification B, and therefore require Council to apply to the Department of Energy, Utilities and Sustainability for concurrence.

Council has already been given notice of assumed concurrences for Concurrence Classification A (as listed in Table 1 of this Policy), and do not need to seek the Department of Energy, Utilities and Sustainability concurrence for these activities.

XI. TABLE 4 - 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 (less than 10 persons)	Beautician
Bistro	Boiler blowdown
Boarding house/hostel kitchen	Car Detailing (excluding automatic drive through and self serve washes)
Butcher shop (retail)	Cooling tower
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
Cafeteria	Dental technician
Chicken/poultry shop (only fresh chickens/game sold)	Doctor's surgery – plaster casts (no x-ray, no laboratory)
Chicken/poultry shop (retail barbeque/charcoal chicken)	Florist
Clubs (kitchen waste)	Funeral parlour, morgue
Commercial kitchen/caterer	Hairdressing (includes barbers)
Community hall/civic centre	Jewellery shop
Day care centre	Laboratory (pathology/analytical)
Delicatessen	Laundry or Laundromat (coin operated)
Doughnut shop	Lawn mower repairs
Fast food outlet (McDonalds, Kentucky Fried Chicken, Burger King, Pizza Hut, Red Rooster, etc)	Mechanical repairs/workshop
Fish shop (retail – fresh and/or cooked)	Mobile cleaning units
Food caravan	Optical service
Fruit and vegetable shop (retail)	Pet shop (retail)
Function centre	School (Primary and Secondary)
Hotel	Service station workshop
Ice cream parlour	Stone working
Juice bar	Swimming pool/spa/hydrotherapy
Mixed business	Vehicle (car) washing (by hand/wand or underbody/engine degrease only)
Motel	Venetian blind cleaning
Commercial retail food preparation activities	Other Commercial activities
Nightclub	Veterinary/animal kennels with x-ray
Nursing home kitchen	Waterless minilab
Nut shop	
Patisserie (croissants and muffins)	
Pie shop	
Pizza shop	
Restaurant	
Salad bar	
Sandwich shop	
School canteen	

Snack bar	
Supermarket (with butcher/delicatessen/seafood/or charcoal chickens)	
Take away food outlet	

The volume of liquid trade waste must be less than 5 kilolitres per day or 1,000 kilolitres per annum except in the case of commercial retail food preparation activities, where upto 16 kilolitres per day is included in this category. If the waste discharged into the sewer exceeds these volumes, the application must be treated as Concurrence Classification B (Chapter 5 of *Liquid Trade Waste Management Guidelines*). Discharges over twenty (20) kilolitres per day must be treated as Concurrence Classification C.

3.4 LIQUID TRADE WASTE CHARGING CATEGORIES

Three (3) classifications of liquid trade waste have been established for concurrence purposes, Classification A, B and C (refer to Section 3.3). For trade waste charging purposes, liquid trade waste dischargers are divided into three (3) charging categories, Category 1, 2 and 3.

The chart below 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 Category 1. Classification C dischargers fall into Charging Category 3.

XII. TABLE 5 – CHARGING CATEGORIES

Concurrence Classification

Charging Category

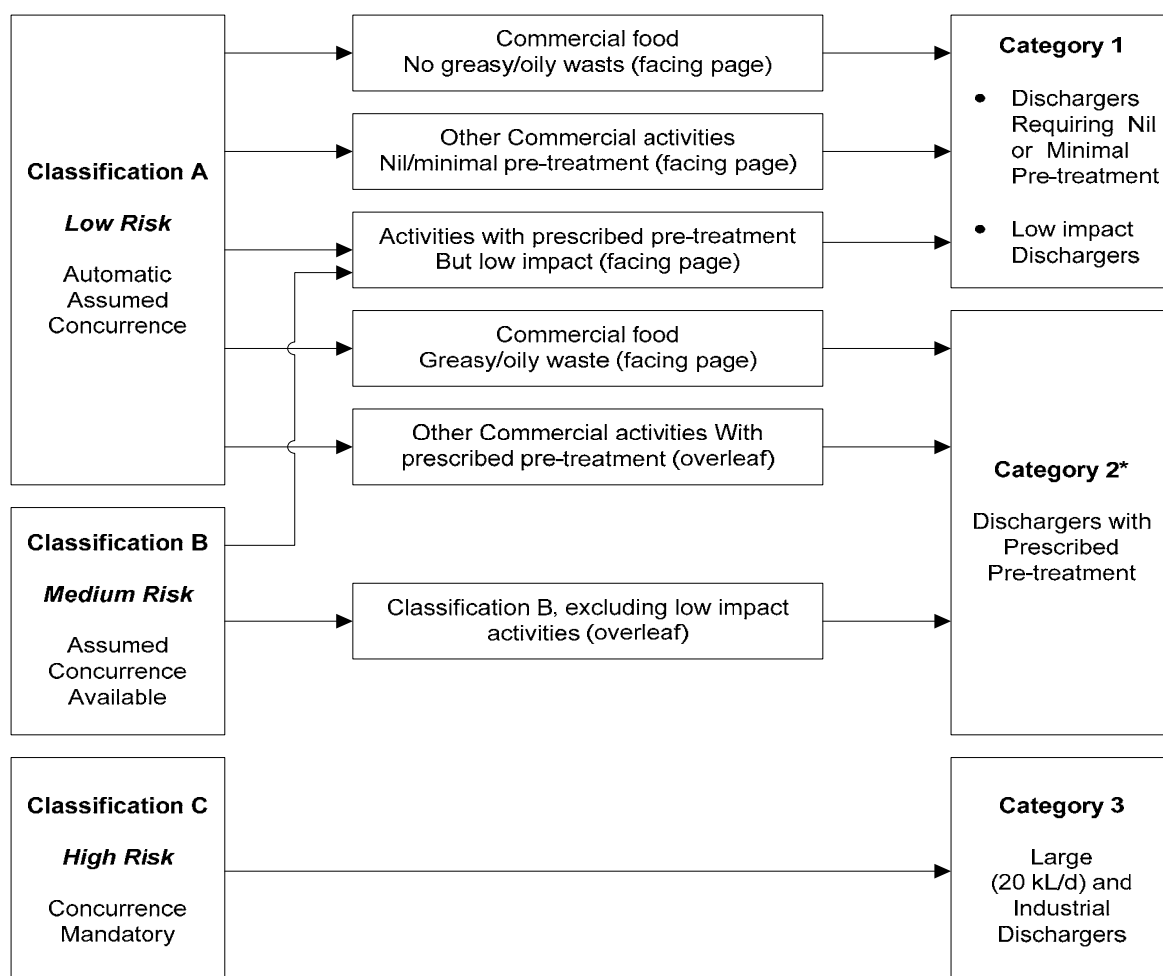


Figure 1 – Charging Categories for Trade Waste

The three charging categories for liquid trade waste dischargers are discussed below.

CATEGORY 1 DISCHARGER

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. Also included are Classification A or Classification B activities with prescribed pre-treatment but low impact on the sewerage system.

Trade waste dischargers requiring nil or minimal pre-treatment include:

- Classification A activities – retail food outlets with **no hot food prepared and/or foods that generate an oily/greasy waste**: bakery (only hot bread cooked on-site), bistro (sandwiches, coffee only), café/coffee shop/coffee lounge, canteen, community hall (minimal food), day care centre, delicatessen, fish shop (fresh fish or retail), 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 shop/salad bar, and take away food outlet.
- Classification A activities – Other Commercial activities: animal wash veterinary (no x-ray), hairdressing/beautician, crafts (less than 200 litres per day), dental surgery (plaster casts, no x-ray unless digital), doctor's surgery (plaster casts, no x-ray), florist, funeral parlour, morgue, mobile cleaning unit, jewellery shop, optical services (retail), public swimming pool, pet shop, and venetian blind cleaning.
 - Classification A or B activities with prescribed pre-treatment but low impact on the sewerage system: boiler blowdown, cooling tower, educational facilities (primary and secondary school, tertiary institution laboratory), industrial boilers, jewellery (stone cutting), laboratory, laundry, medical centre (no x-ray), mobile garbage bin washing, optical services, plants (retail), and vehicle washing.

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 characterized. Trade waste dischargers with prescribed pre-treatment include:

- Classification A activities - premises that **prepare and/or serve hot food or foods that generate an oily/greasy waste**: bakeries (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 (if the type and size of kitchen fixture installed enables catering for large functions), 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, and take away food outlet.
- Classification A activities – **Other commercial activities**: car detailing, craft activities greater than 200 litres per day, dental surgery with x-ray, lawn mower repairs, mechanical workshop, stone working, veterinary (with x-ray), and waterless minilab.
- Classification B activities - premises that **may use prescribed pre-treatment systems**: auto dismantler, bus/coach depot, car/truck dealership (fleet vehicle operations), construction equipment maintenance and cleaning, equipment hire maintenance and cleaning, forklift maintenance, glass cutting and grinding (not optical e.g. windscreens), graphic arts, medical centre (with x-ray) and hospital (with or without x-ray), oyster processing (shucking), panel beating, photographic lab, screen printing, service station forecourt, shopping complex, tray work/manual development, truck wash, water wash minilab, and x-ray radiologist.
- Other Classification A activities: fish shop (fresh fish for retail).

CATEGORY 3 DISCHARGER (large or industrial waste dischargers)

Category 3 liquid 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 kilolitres per day) of liquid trade waste to the sewerage system. Any Category 1 or Category 2 discharger whose volume exceeds 20 kilolitres per day becomes a Category 3 discharger.

- Large trade waste dischargers and other Classification C activities include: abattoir, brewery, cosmetics/perfumes manufacture, dairy processing (milk/cheese/yoghurt/ice cream etc), food processing (cereals/cannery/confectionary/edible oils/fats/essence/flavours/fruit juices/gelatine/honey/meat/small goods/vinegar/yeast manufacture etc), fruit

processing, flour milling, glue manufacturer, egg processing, pet food processing, potato chip manufacture, poultry processing, saleyards, seafood processing, soft drink/cordial manufacture, starch manufacture, sugar distillery/refinery, tanker cleaning, tannery, tip leachate, transport depot/terminal, wholesale meat processing and wine/spirit manufacture.

- Dischargers of industrial waste include the following Classification C activities: abrasives (mining), acid pickling, adhesive/latex, agricultural rural and veterinary drugs, airport terminal, anodizing, bitumen and tar, bottle washing, cardboard and carton manufacture, caustic degreasing, chemical manufacture, cyanide hardening, detergent processing, drum washing, electroplating, engine gearbox reconditioning, extrusion and moulding (plastic/metal), feather washing, fell monger, felt manufacture, fertilizers, fiberglass manufacture, filter cleaning, foundry, galvanizing, gas production, glass manufacturing, ink manufacture, liquid wastewater treatment facility (grease trap, receival depot and other pump out waste depot), metal finishing, metal processing (refining/rumbling/non-cyanide heat treatment/phosphating/photo engraving/printed circuit etching/sheet metal fabrication etc), oil recycling (petrochemical), paint manufacture, paper processing, pharmaceuticals, powdercoating, printing (newspaper, lithographic), radiator repairer, sandblasting, slipway, soap/detergent manufacture, timber processing (joinery and furniture/plywood/hardwood), textile processing (wool dyeing/spinning/scouring), and waxes and polishes.

3.5 LIQUID TRADE WASTE FEES AND CHARGES

Council provides sewerage and liquid trade waste services on a commercial basis, with cost recovery through sewerage and liquid trade waste fees and charges. Council's fees and charges are reviewed and advertised annually for public comment in its draft Annual Management Plan. The following summarises the applicable trade waste fees and charges.

Liquid trade waste discharged to the sewerage system from industrial, commercial or other non-residential customers can impose significant costs on sewage 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 per kilolitre for non-residential sewerage, appropriate fees and charges are levied for liquid trade waste.

Council's liquid trade waste fees and charges include:

- Application fee
- Annual trade waste fee
- Re-inspection fee
- Trade waste usage charge
- Excess mass charges
- Food waste disposal charge
- Non-compliance excess mass charge
- Non-compliance penalty

All discharges of liquid trade waste to Council's sewerage system should be aware that they are subject to prosecution and imposition of fines under Section 626 to 268 and 634 to 641 of the Local Government Act 1993, Section 120 of the Protection of the Environment (Operations) Act 1997, and Clause 55 of the Protection of the Environment Operations (General) Regulation 1998. In addition to fines, Council may recover costs of damages and fines incurred by Council as a result of an illegal trade waste discharge.

Under provisions of the Local Government Act 1993, Section 502 and Section 504, Council may make a charge for the actual use of a service provided by the Council.

Except as otherwise provided by this Policy, the charges which the Council may impose in accordance with an Agreement, are the charges specified in Table 8. These charges are to be calculated annually from the Council's adopted budget estimates.

The charges in Table 8 will apply to all dischargers.

Category A dischargers shall have the premises annual non-residential sewerage bill deducted from the total annual liquid trade waste effluent charges calculated from Table 8.

Dischargers who face a large increases in liquid trade waste fees and charges may negotiate for these charges to be implemented over a three (3) year period. The amounts payable are to be 33% of the calculated total charge in the first year, 66% in the second year, and 100% in the third year.

3.5.1 – 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.

3.5.2 – 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.

As part of an inspection, Council or its agents may undertake monitoring of the liquid trade waste discharges from premises or business. Such monitoring may include but is not limited to, flow measurement and the sampling of the liquid trade waste. Where more than one instance of such monitoring is undertaken by Council, or its agents, in a financial year, the cost involved may be recovered from the discharger.

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.

In view of the adverse impact of wastes with a high concentration of oil and grease on Council's sewage transportation system, Council will carry out inspections of commercial premises preparing hot food at least four (4) times per annum. The cost of these scheduled inspections is included in the annual trade waste fee for such premises.

3.5.3 – RE-INSPECTION FEE

Where a non-compliance with the conditions of an approval have been detected and the discharger is required to address these issues, Council will undertake reinspection to confirm that remedial action has been satisfactorily implemented. Council will impose a fee for each reinspection. The reinspection fee will be set annually by Council on the basis of full cost recovery. A reinspection may include the

monitoring of liquid trade waste discharges, the cost of which may be recovered from the discharger.

3.5.4 – 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 (4) = Q x \$1.20/kL

Where Q = Volume (kL) of liquid trade waste discharged to sewer.

This trade waste usage charge applies to a discharger with appropriately sized and maintained pretreatment facilities. However, if Council's inspection of such a discharger's premises reveals that the pretreatment equipment had not been properly maintained or desludged, a trade waste usage charge of \$11.00/kL will be applied for the relevant billing period.

Effluent from some undersized grease arrestors could be improved by installing a surge control device into a grease arrestor, or by increasing the pump out frequency. Such devices and/or measures are deemed by Council to be appropriate pretreatment (for that particular discharger only).

3.5.5 – EXCESS MASS CHARGES

Excess mass charges may apply for substances discharged in excess of the deemed concentrations in domestic sewage shown in the following table.

XIII. TABLE 6 – EXCESS MASS CHARGES

SUBSTANCE	CONCENTRATION (mg/L)
Biochemical Oxygen Demand (BOD5)	300
Suspended Solids	300
Total Oil and Grease	50
Ammonia (as Nitrogen)	35
Total Kjeldahl Nitrogen	50
Total Phosphorus	10
Total Dissolved Solids	1000

For SO₄ concentration: the higher of 50 mg/L and the concentration in the potable waster supply. Substances not listed above are deemed not to be present in domestic sewage.

For excess mass calculations, the following Equation 1 (below) will be applied:

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 sewage
- Q = Volume (kL) of liquid trade waste discharged to the sewerage system
- U = Unit prices (\$/kg) for disposal of substance to the sewerage system

While Equation 1 is applicable for excess mass charges for wastes complying with acceptance limits in the *Liquid Trade Waste Management Guidelines*, Council will use an exponential type equation for certain large trade waste dischargers with high strength waste as shown in Equation 2 (below) for BOD₅, and in Equation 3 for pH being outside the approved range.

Equation 2 (Where BOD₅ > 600mg/L)

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

For example if C = \$0.54/kg, equation (2) would result in the following excess mass charges:

For BOD₅ 600mg/L charge of \$0.54/kg
 BOD₅ 1200mg/L charge of \$1.70/kg
 BOD₅ 2400mg/L charge of \$4.38/kg

Equation (2) provides a strong incentive for dischargers to reduce the strength of waste and will be applied in cases where Council approves acceptance limits higher than 600mg/L. In addition, Equation (5) will be used where the discharger has failed to meet their approved BOD₅ limit on at least two (2) instances in a financial year.

Equation (3) provides an incentive for dischargers to apply appropriate pH correction so their waste remains within the approved pH limits. Where a large discharger fails to meet their pH limits on two (2) or more occasions in a financial year, Council will require the discharger 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.

In the case of pH where it is outside the approved range for the discharger:

Equation 3

$$\text{Charge for pH (\$/kg)} = K \times (\text{actual pH} - \text{approved pH})^* \times 2^{(\text{actual pH} - \text{approved pH})^*}$$

K = pH coefficient = 0.3 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

$$\text{Charge (\$/kL)} = 0.3 \times [7 - 8] \times 2^{[7 - 8]} = \$0.6/\text{kL}$$

Case 2: pH measured 11.0

$$\text{Charge (\$/kL)} = 0.3 \times [11 - 9] \times 2^{[11 - 9]} = \$2.4/\text{kL}$$

3.5.6 – FOOD WASTE DISPOSAL CHARGE (For existing installations only, new installations are not permitted)

Where Council has approved the installation of a food waste disposal unit for a hospital, nursing home or other eligible facility, the following additional food waste disposal charge will be payable annually.

Food Waste Disposal Charge (\$) = $B \times U_F$

Where B = Number of beds in hospital or nursing home.

U_F = Annual unit price (\$/bed) for a food waste disposal unit at a hospital or nursing home.

3.5.7 – NON-COMPLIANCE EXCESS MASS CHARGES

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 for non-compliant excess mass charges, the Equation 4 (below) shall apply, except for BOD₅ where Equation 5 shall apply.

Equation 4

$$\text{Non-Compliance Excess Mass Charges (\$)} = \frac{(S - A) \times Q \times 2U}{1,000} + \frac{(S - D) \times Q \times U}{1,000}$$

Where:

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

A = 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 = Unit prices (\$/kg) for disposal of pollutant to sewerage system, as per section 3.5.5.

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

Non-compliance excess mass charges for BOD₅ will be as shown in Equation (5) below:

Equation 5

$$\text{BOD}_5 \text{ non-compliance Excess Mass Charge} = 2C \times \frac{(A - 300 \text{ mg / L})}{600 \text{ mg / L}} \times 1.05 \frac{(A - 600 \text{ mg / L})}{600 \text{ mg / L}} + 4C \times \frac{(\text{Actual BOD} - A)}{600 \text{ mg / L}} \times 1.05 \frac{(\text{Actual BOD} - A)}{600 \text{ mg / L}} \quad (5)$$

For example, if C = \$0.54/kg, BOD₅ measured level is 2,400mg/L and the acceptance limit in Council’s approval is 600mg/L, equation (5) would result in a non-compliance excess mass charge of \$8.04/kg.

The non-compliance excess mass charges shown above are in lieu of the excess mass charges in section 3.5.5.

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.

3.5.8 – 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 relating from illegal, prohibited or unapproved liquid trade waste discharges. 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.

3.5.9 – 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 waste services from Council. 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.

The following table is a summary of applicable trade waste fees and charges:

XIV. TABLE 7 – SUMMARY OF TRADE WASTE FEES AND CHARGES

(In addition, a Food Waste Disposal Charge per bed will apply where Council has approved the use of an existing food waste disposal unit for a hospital, nursing home or other eligible facility (refer to section 3.5.6))

DISCHARGE CATEGORY	APPLICATION FEE	ANNUAL NON-RESIDENTIAL SEWERAGE BILL WITH A SEWERAGE USAGE CHARGE PER KL	ANNUAL TRADE WASTE FEE	RE-INSPECTION (When Required)	TRADE WASTE USAGE CHARGE PER KL	EXCESS MASS CHARGES PER KG	NON-COMPLIANCE EXCESS MASS CHARGES (if required)	NON-COMPLIANCE PENALTY (if required)
1	YES *	YES	YES	YES	NO	NO	NO	YES
2	YES	YES	YES	YES	YES	NO	NO	YES
3	YES	YES	YES	YES	NO	YES	YES	YES

* This charge is not applicable for discharges exempted in Table 1.

All dischargers of liquid trade waste to Council's sewerage system should be aware that they are subject to prosecution and imposition of fines under the Local Government Act 1993, 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.

3.6 – MONITORING

Council will carry out inspections of the premises of all liquid trade waste dischargers and their treatment facilities at least once per annum. Inspections of commercial premises preparing hot food will be undertaken four (4) times per annum (refer to 3.5.2 of this Policy). Inspection of large and industrial discharges will 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 of agreement. They may also be required to pay for any sampling and testing of liquid trade waste undertaken by Council.

For this purpose, and inspection/sampling point, where 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 flow metering system) or
- install a flow measurement device on a temporary basis to obtain enough data to determine a basis for assessing the flow rate and volume; and
- 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 Department of Energy, Utilities and Sustainability to ensure reliability and accurate results. When the discharger is sampling the effluent, Council may randomly take duplicates to confirm the waste characteristics.

3.7 – LIQUID TRADE WASTE SERVICES AGREEMENTS

In addition to approval under the Local Government Act 1993, Council requires persons wishing to discharge large volumes (greater than 20 kilolitres per day) or industrial waste (mainly Concurrence Classification C type discharges) into its sewerage system to enter into a liquid trade waste services agreement.

This agreement sets 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 3.2 of this Policy). The conditions will be binding on the Applicant and Council. The agreement will be for a period of upto five (5) years. No discharge is to be made to Council's sewerage system until an agreement or an interim agreement has been executed.

Provisions 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 discharge 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 of the environment;
- entry by Council officers to inspect the 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; and
- the amount of bond/security to be lodged with Council prior to discharging to the sewerage system.

3.8 – 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 provided under the Local Government Act 1993 (Sections 626, 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 approval is an offence under Section 120 (1) of the Protection of the Environment (Operations) Act 1997. In addition, under Section 22 of this Act, Council may issue a penalty notice (ie 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 9 of the agreement. Suspensions may also apply and may include a notice to cease the discharge.

3.9 – 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 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; or
- for failure to comply with a condition of the approval.

3.10 - PREVENTION OF WASTE TO 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.

3.11 – EFFLUENT IMPROVEMENT PROGRAMMES

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

3.12 – DUE DILIGENCE PROGRAMMES AND CONTINGENCY PLANS

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

A discharger may be required to submit a due diligence program and a contingency plan for Concurrence Classification B discharges 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 must provide a due diligence programme and contingency plan to Council with six (6) months and three (3) months respectively of receiving a liquid trade waste approval.

It should be noted that:
plan to Council within six (6) months and three (3) months respectively of receiving a liquid trade waste approval.

- It should be noted that:
- If the discharger has an accredited environmental management system in place, a due diligence programme and contingency plan will not be required. However, proof of accreditation must be provided to Council with the application; and
 - Where Council considers there is potential risk to the sewerage system from a discharge, it may request a due diligence programme and contingency plan be submitted prior to commencing the discharge.

XV. TABLE 8 - ANNUAL CHARGES

As detailed in Part 3 of this Policy

3.5.1 – APPLICATION FEES

Category 1	-	\$37.00
Category 2	-	\$55.00
Category 3	-	\$111.00

3.5.2 ANNUAL TRADE WASTE FEE

Category 1	-	\$128.00
Category 2	-	\$190.00
Category 3	-	\$348.00

3.5.3 RE-INSPECTION FEE - \$55.00

3.5.4 TRADE WASTE USAGE CHARGE

For Commercial premises that have installed and maintained appropriate pre-treatment facilities will be require to pay the following:

Trade Waste Usage Charge (\$) = Volume of liquid trade waste discharged to sewer x \$1.20 per kilolitre.

For Commercial premises that have not installed and maintained appropriate pre-treatment facilities will be require to pay the following:

Trade Waste Usage Charge (\$) = Volume of liquid trade waste discharged to sewer x \$11.00 per kilolitre.

3.5.5 EXCESS MASS CHARGE

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 sewage
 Q = Volume (kL) of liquid trade waste discharged to the sewerage system
 U = Unit prices (\$/kg) for disposal of substance to the sewerage system

BOD ₅	\$0.58 per kilogram
TSS	\$0.45 per kilogram
Oil and Grease	\$1.13 per kilogram

3.5.6 FOOD WASTE DISPOSAL CHARGE

Food Waste Disposal Charge (\$) = $B \times U_F$

Where B = Number of beds in hospital or nursing home.

U_F = Annual unit price (\$/bed) for a food waste disposal unit at a hospital or nursing home.

3.5.7 NON-COMPLIANCE EXCESS MASS CHARGES

Non-Compliance Excess Mass Charges (\$) = $\frac{(S - A) \times Q \times 2U}{1,000} + \frac{(S - D) \times Q \times U}{1,000}$

Where:

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

A = 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 = Unit prices (\$/kg) for disposal of pollutant to sewerage system, as per section 3.5.5.

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

Notes:

1. These charges will be updated annually, based on Council's accepted estimates for operating and maintaining the Lithgow Sewerage Treatment Plant.
2. Council reserves the right to set and charge fees for additional pollutant parameters (e.g. Ammonia, phosphorus and/or sulphate), should the Department of Environment and Conservation's licence requirements result in extra costs to Council, or should the parameters be found to be detrimental to Council's sewerage system.
3. Consultation with Council's fees and charges and Management Plan should be undertaken to ensure currency of the charges which shall be applied.

XVI. TABLE 9 - MATTER THAT MUST BE DISCHARGED INTO THE SEWERAGE SYSTEM

An approval under Section 68 of the Local Government Act 1993 allowing work to be carried out for the purpose of enabling premises to be connected to the Council's sewerage system is taken to include a condition that the occupier of the premises must comply with the requirements of this clause.

An order under Section 124 of the Local Government Act 1993 requiring premises to be connected to the Council's sewerage system is not complied with unless the requirements of this clause are complied with.

The occupier of the premises connected to Council's sewerage system must ensure that there is discharge into the system:

- All human waste, household slops, laundry and bath water and other household liquid refuse (not being pan contents or septic tank effluent);
- All polluted matter from stables, cow sheds, dairies, market places, washing areas, or other polluted premises; and
- All trade waste.

Sub clause 3 is subject to such exceptions and conditions as the Council may specify in the approval referred to in sub clause 1 or the order refused to in sub clause 2.

An approval under Section 68 of the Local Government Act 1993 to connect premises referred to in sub clause 3(b) to the Council's sewerage system must not be given unless:

- the premises have roofing sufficient to prevent the entry of rainwater from the roof of the sewerage system and all necessary steps are taken to ensure that no rainwater can be discharged onto that place from adjoining areas; and
- the premises are paved with materials approved by, and the paving is graded to the satisfaction of, an Inspector; and
- the drain from those premises is provided with a silt trap approved by the Inspector and is connected to the house drain:
- on the inlet side of the boundary trap; or
- if the interceptor trap or boundary trap is omitted, on the upstream side of the position that would normally be occupied by that fitting.

An occupier of premises referred to in subsection 3(b) must not discharge trade waste from the premises into the Council's sewerage system, unless:

- an order of the Council served on the person in accordance with sub clause 7 is complied within the period specified in the order;
- the waste is passed through settling tanks, or other tanks, or appliances approved by the Council and is treated in such manner as may be specified by the Council; and
- all tank, appliances and apparatus on the premises for the treatment of trade wastes are kept clean and maintained in an efficient condition to the satisfaction of the Council or an Inspector, and have not been modified without the approval in writing of the Council or an Inspector.

The Council may, by order served on the occupier of the trade premises, require that the occupier is to ensure that all or any of the following are complied with:

- that the aggregate daily quantity of trade waste allowed to pass from the premises into the Council's sewerage system does not exceed a quantity specified in the order;

- that the rate of discharge of trade waste from the premises does not exceed a rate so specified;
- that the size and capacity of the drain for conveying trade waste into the system is in accordance with a size and capacity so specified;
- that trade waste is discharged into the system from the premises only during periods so specified;
- that the volume of trade waste to be discharged into the system is measured and determined by a meter or some other means of measurement approved by the Council; and
- that any specific modifications to any works on the premises for the treatment of trade waste, or to the method of treating trade waste discharged from the premises, are carried out.

Maintained by Department:	Community and Culture	Approved by:	Council		
Reference:	Dataworks: Policy Register	Council Policy No:	11.4	Effective Date:	February 2007
Min No:	07- 52	Version No:	2	Review Date:	February 2008
Attachments:					