# LIQUID TRADE WASTE - REGULATION POLICY

Reference number: POL 006

**Approval date:** 17 October 2022

**Policy owner:** Manager Wastewater & Stormwater

Next review: September 2029

## **Purpose**

This policy sets out how Wagga Wagga City Council will regulate liquid trade waste discharges to its sewerage system in accordance with the NSW Framework for Regulation of Liquid Trade Waste, Section 7.1 of the Regulatory and Assurance Framework for local water utilities.

Sewerage systems are generally designed to cater for liquid waste from domestic sources that are essentially of predictable strength and quality. Council <u>may</u> accept liquid trade waste into its sewerage system as a <u>service</u> to businesses and 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.

This Policy is consistent with the *Liquid Trade Waste Management Guidelines 2021* developed by the Water Utilities branch of the NSW Department of Planning and Environment.

## Scope

#### What is liquid trade waste?

Liquid trade waste is defined in the Local Government (General) Regulation 2021 as below:

• 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 from:

- industrial premises
- business/commercial premises (e.g. beautician, florist, hairdresser, hotel, motel, restaurant, butcher, supermarket, etc.)
- community/public premises (including clubs, school, college, university, hospital and nursing home)
- any commercial activities carried out at residential premises
- saleyards, racecourses and stables and kennels that are not associated with domestic households
- tankered human waste, ship-to-shore waste from marina pump-out facilities, portable toilet waste and established sites for the discharge of pan contents from mobile homes/caravans



#### POL 006 – Liquid Trade Waste – Regulation Policy

• any other waste tankered to the sewerage facilities, e.g. commercial or industrial waste from un-sewered areas.

#### Liquid trade waste excludes:

- toilet, hand wash basin (used for personal hygiene only), shower and bath wastes derived from all the premises and activities mentioned above
- wastewater from residential toilets, kitchens, bathrooms or laundries (i.e. domestic sewage)
- wastewater from common laundry facilities in caravan parks (Note that discharges from common kitchen facilities in caravan parks are liquid trade waste)
- residential pool backwash.



## **CONTENTS**

Pur	pose	1
Scc	pe	1
1	Introduction	4
2	Structure of the Policy	4
4	Liquid trade waste service agreement	14
5	Enforcement of approvals and agreements	14
6	Prevention of waste of water	14
7	Effluent improvement plans	15
8	Due diligence programs and contingency plans	15
App	pendix A - Definitions	16
App	pendix B – Deemed to be Approved Activities	20
App	pendix C – Prohibited or restricted substances and wastes from discharge to sewer	23
App	pendix D – Non-residential sewerage and liquid trade waste fees and charges	26
App	pendix E – List of discharges council may approve	37
App	pendix F – Legislative provisions	39



#### 1 Introduction

This Policy 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 system. The policy also promotes waste minimisation, water conservation, water recycling and biosolids reuse.

In addition, the approval, monitoring and enforcement processes for liquid trade wastes discharged to council's sewerage system and the levying of commercial sewerage and liquid trade waste fees and charges are described in this document. The procedure for liquid trade waste approval is governed by Chapter 7 of the Local Government Act.

Under section 68 of the *Local Government Act 1993* (Act), a person wishing to discharge liquid trade waste to the sewerage system must obtain prior approval from council. Discharge of liquid waste other than domestic sewage without prior approval is an offence under section 626 of the Act.

## 1.1 Objectives

- The objectives of this policy are:
- to protect public and workers health and safety and the environment
- to protect council's assets from damage
- to minimise adverse impacts on the sewage treatment processes
- to assist council meeting regulatory and licence compliance
- to promote water conservation, waste minimization, cleaner production, effluent recycling and biosolids reuse
- to provide an environmentally responsible liquid trade waste service to the non-residential sector
- to ensure commercial provision of services and full cost recovery through appropriate sewerage and liquid trade waste fees and charges.

## 2 Structure of the Policy

This policy comprises three parts:

- Part 1 specifies the circumstances in which a person is exempt from the necessity to apply for an approval to discharge liquid trade waste to council's 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
- Part 3 specifies the application procedure and approval process, liquid trade waste discharge categories and applicable fees and charges, the NSW Framework for Regulation of Liquid Trade Waste (Section 7.1 of the Regulatory and Assurance Framework for local water utilities), alignment with the Australian Wastewater Quality Management Guidelines and other relevant information.



#### 2.1 Part 1 – Exemptions

The list of discharges exempts from obtaining council's approval is provided in Appendix B. These discharges are known as 'deemed to be approved'. Each such discharger must meet the standard requirements specified in Appendix B.

## 2.2 Part 2 - Criteria for approval to discharge liquid trade waste into council's sewerage system

#### 2.2.1 Factors for consideration

Council's decision to accept liquid waste into its sewerage system will be based on the discharger satisfying council's requirements. Therefore, when determining an application to discharge liquid waste to the sewerage system, council will consider the following factors:

- The potential impacts of the proposed discharge on council's ability to meet the objectives outlined in s. 1.1 of this document.
- 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 contingency measures in an event of pre-treatment system failure
- The capability of the sewerage system (reticulation and treatment components) to accept the quantity and quality of the proposed liquid waste
- The adequacy of chemical storage and handling facilities, and the proposed safeguards for prevention of spills and leaks entering the sewerage system
- The adequacy of the proposed due diligence program and contingency plan, where required.
- Proposed management of prohibited substances and other liquid waste not planned to be discharged to the sewerage system and safeguards to avoid any accidental discharge
- The potential for stormwater entering the sewerage system and adequacy of proposed stormwater controls
- The potential for growth of the community

#### 2.2.2 Discharge quality

Council's acceptance limits for liquid trade waste discharges are set out in Table 1. These limits are consistent with the acceptance limits specified in the *Liquid Trade Waste Management Guidelines*, 2021 published by the Department of Planning, Industry and Environment.

Table 1: Acceptance limits for liquid trade waste into the sewerage system

Parameter	Limits	
Flow Rate	The maximum daily and instantaneous rate of discharge (kL/h or L/s) is determined based on the available capacity of the sewer. Large dischargers are required to provide a balancing tank to even out the load on the sewage treatment works.	
BOD <sub>5</sub>	Normally approved at 300 mg/L. Concentrations up to 600 mg/L may be accepted.	
Suspended solids	Normally approved at 300 mg/L. Concentrations up to 600 mg/L may be accepted.	



Parameter	Limits
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. The acceptance limit may be reduced depending on available effluent disposal options and may be subjected to a mass load limit.
Temperature	Less than 38°C.
рН	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 detergents are to be biodegradable. A limit on the concentration of 50 mg/L (as MBAS) may be imposed on large liquid trade wastes discharges.
Colour	Colour must be biodegradable. No visible colour when diluted to the equivalent dilution afforded by domestic sewage flow.
	Specific limits may be imposed on industrial discharges where colour has a potential to interfere with sewage treatment processes and the effluent management.
Radioactive Substances	If expected to be present (e.g. lodine 131 from ablation), acceptance requirements will be set on a case-by-case assessment.

Table 2: Acceptance limits for inorganic compounds

Acceptance limits for inorganic compounds	Maximum concentration (mg/L)
Ammonia (as N)	50
Boron	5
Bromine	5
Chlorine	10
Cyanide	1
Fluoride	30
Nitrogen (total Kjeldahl)	100
Phosphorus (total)	20
Sulphate (as SO4)	500
Sulphide (as S)	1



**Table 3: Acceptance limits for organic compounds** 

Acceptance limits for organic compounds	Maximum concentration (mg/L)
Benzene	< 0.001
Toluene	0.5
Ethylbenzene	1
Xylene	1
Formaldehyde	30
Phenolic compounds non-halogenated	1
Petroleum Hydrocarbons <sup>1</sup>	
C6-C10 (flammable)	5
Total Recoverable Hydrocarbons (TRH)	30
Pesticides general (except organochlorine and organophosphorus)	0.1
Polynuclear Aromatic Hydrocarbons (PAH)	5

**Table 4: Acceptance limits for metals** 

Acceptance limits for metals	Maximum concentration (mg/L)	Allowed daily mass limit (g/d)
Aluminium	100	-
Arsenic	0.5	2
Cadmium	1	5
Chromium <sup>2</sup>	3	10
Cobalt	5	15
Copper	5	15
Iron	100	-
Lead	1	5
Manganese	10	30
Mercury	0.01	0.05
Molybdenum	5	15
Nickel	1	5
Selenium	1	5
Silver	2	5
Tin	5	15
Zinc	1	5

<sup>&</sup>lt;sup>1</sup> Always ask a laboratory to carry out a silica gel clean up, if other than petroleum products are expected to be present in a liquid trade waste sample, e.g. animal fats, plant oil, soil, etc.

<sup>&</sup>lt;sup>2</sup> 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



Acceptance limits for metals	Maximum concentration (mg/L)	Allowed daily mass limit (g/d)
Total heavy metals excluding aluminium, iron and manganese	Less than 30 mg/L and subject to total mass loading requirements	-

#### Notes:

- 1. Acceptance limits for substances not listed in above tables will be determined on a case by case basis.
- 2. The quality of liquid trade waste from some low risk commercial activities in classification A and B will exceed acceptance limits listed in above table. As a higher level of pretreatment is not cost-effective, such waste is acceptable if the discharger installs, maintains and properly operates the required on-site pre-treatment. Similarly, septic and pan waste may exceed some acceptance limits.

#### 2.2.3 Prohibited or restricted substances and waste

Substances prohibited from being discharged into the sewerage system unless they are specifically approved under section 68 of the Act are listed in **Table 5**. In addition, 2.2.3.1 lists the discharges either prohibited or restricted. Refer to Appendix C for detailed description of substances and discharges either prohibited or restricted.

#### Table 5: Waste Prohibited from discharge to the 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 waste arising from the preparation of these substances
- per- and poly-fluoroalkyl substances (PFAS)
- any substances liable to produce noxious or poisonous vapours in the sewerage system
- organic solvents and mineral oil\*
- any flammable or explosive substance<sup>#</sup>
- discharges from 'Bulk Fuel Depots'
- discharges from chemicals and/or oil storage areas
- natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions
- roof, rain, surface, seepage or ground water, unless specifically permitted (clause 137A of the Local Government (General) Regulation 2021)
- solid matter\*
- disposable products including wet wipes, cleaning wipes, colostomy bags, cat litter and other products marketed as flushable
- any substance assessed as not suitable to be discharged into the sewerage system
- liquid waste that contains pollutants at concentrations which inhibit the sewage treatment process
- any other substances listed in a relevant regulation

<sup>#</sup> In excess of the approved limit



#### 2.2.3.1 Other substances/discharged either prohibited or restricted

- Stormwater from open areas
- Contaminated groundwater
- Landfill leachate
- Discharge from float tanks
- Discharge from new service station forecourts and other refuelling points
- Discharge of liquid waste arising from liquefaction and/or pulverisation of solid waste by physical or chemical processes (e.g. garbage grinders/in-sinkerators, macerators, alkaline hydrolysis).
- Discharge from solid food waste processing units (digesters/composters, etc.)
- Discharge of disposable waste products including those marked as flushable
- Use of additives in pre-treatment systems
- For further details on limitations and restrictions applicable to above discharges, refer to Appendix C of this policy, Chapter 3 of the NSW Liquid Trade Waste Management Guidelines, 2021.

#### 2.3 Part 3 – Matters relating to liquid trade waste approvals

#### 2.3.1 Application procedures and approval process

Council's written approval is required prior to commence discharging liquid trade waste to its sewerage system, under s.68 of the Local Government Act 1993. Application forms are available from council.

The applicant must lodge a trade waste application providing all requested information.

A trade waste application is not required to discharge liquid trade waste from 'deemed to be approved' activities listed in Appendix B.

#### 2.3.2 Who can lodge an application

The applicant must be either the owner or the occupier of the premises. If the applicant is not the owner of the premises, the owner's consent to the application is required.

#### 2.3.3 Council's process in determination of applications

Council may request an applicant to provide further information to enable it to determine the application.

#### 2.3.4 Approval of applications

Where an application is approved, council will notify the applicant including any conditions of the approval and reasons for such conditions. The duration of the approval will be as stated in the approval.

An applicant may make a minor amendment or withdraw an application before it is processed 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.

#### 2.3.5 Refusal

If an application is refused, council will notify the applicant of the grounds for refusal.



Under section 100 of the Act the applicant may request the review of council's determination. Under section 176 of the Act, the applicant dissatisfied with council's determination may appeal to the Land and Environment Court within 12 months.

#### 2.3.6 Change of approval holder

An approval to discharge liquid trade waste to council's sewerage system 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. 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.

#### 2.3.7 Validity of an existing approval

A new approval is required where there is a change of:

- approval holder (either owner or occupier can be an approval holder)
- · activity generating the waste
- the quantity or the nature of liquid trade waste
- approval conditions.

#### 2.3.8 Modification and revocation of approvals

Council reserves the right to modify or revoke an approval to discharge liquid trade waste to the sewerage system under the circumstances described in s.108 of the Local Government Act 1993.

#### 2.3.9 Concurrence

If council supports an application and has a notice stating that concurrence of the Secretary, NSW Department of Climate Change, Energy, the Environment and Water can be assumed for the liquid trade waste relevant to the application, council will approve the application. Otherwise, council will seek concurrence to its approval.

For concurrence purposes, liquid trade waste discharges are divided into four classifications.

- Concurrence classification A liquid trade waste for which council has been authorised to assume concurrence to the approval subject to certain requirements
- Concurrence classification B liquid trade waste for which 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 etc. Council may apply for authorisation to assume concurrence to the approval subject to certain conditions
- Concurrence classification C all other liquid trade waste that does not fall within concurrence classification A, B or S, and therefore requires council to forward the application for concurrence.

Appendix E lists the discharges that council can approve without seeking concurrence from the department.



#### 3 Sewerage and liquid trade waste fees and charges

Council provides sewerage and liquid trade waste services on a commercial basis to non-residential dischargers, with full cost recovery through sewerage and liquid trade waste fees and charges. Council implements sound pricing for non-residential sewerage and liquid trade waste services to ensure that dischargers bear a fair share of the cost of providing sewerage services and to facilitate appropriate pre-treatment, waste minimisation and water conservation.

The current sewerage and liquid trade waste fees and charges are provided on council's website <a href="https://wagga.nsw.gov.au/the-council/planning-and-reporting/fees-and-charges">https://wagga.nsw.gov.au/the-council/planning-and-reporting/fees-and-charges</a>
Council's liquid trade waste fees and charges may include:

- general fees and charges (application fee, annual liquid trade waste fee, inspection and/or re-inspection fees and renewal fee)
- category specific charges (trade waste usage charges for charging category 2 discharges, excess mass charges for charging category 3 discharges, charges for charging category 2S discharges and non-compliance charges)
- other charges related to the nature of waste (eg. charges for the discharge of stormwater from large areas)

Detailed description of the liquid trade waste fees and charges and the calculation methodology is provided in Appendix D.

#### 3.1 Liquid trade waste charging categories

For charging purposes there are 4 liquid trade waste charging categories:

- Category 1 discharges requiring minimal pre-treatment, or prescribed pre-treatment and of a relatively low risk to the sewerage system. These dischargers will only pay an annual fee. If pre-treatment equipment is not provided or maintained, noncompliance charges will be applied.
- Category 2 discharges with prescribed pre-treatment<sup>3</sup> and other activities listed under this charging category in Appendix D. These dischargers will pay trade waste usage charge and annual trade waste fee. If pre-treatment equipment is not provided or not maintained, then such dischargers will be required to pay non-compliance usage charge.
- Category 2S transporters who tanker human waste to council's STWs, owners/operators of ship-to-shore pump out facilities and owners/operators of 'dump points' directly connected to sewer
- Category 3 large (>20 kL/d) and industrial discharges (excluding shopping centres and institutions). Such dischargers will pay excess mass charges. If the discharge fails to comply with council's acceptance limits, dischargers will be required to pay noncompliance excess mass charges and pH charges

Note that these charging categories are different to four classifications that have been established for concurrence purposes (i.e. classification A, B, C and S). The relationship between concurrence classifications and charging categories are shown in Figure 1 in Appendix D.

<sup>&</sup>lt;sup>3</sup> Excludes activities in Category 1



#### 3.2 Non-compliance liquid trade waste charges

In order to encourage compliance, council may apply non-compliance trade waste charges. Refer to Appendix D for further details of non-compliance charges for different charging categories.

Council will continue applying non-compliance charges until the discharge meets council's approved quality (or the liquid trade waste policy) limits, within the timeframe determined by council for remedying the problem. If the discharger fails to rectify the problem within an agreed timeframe, the discharger may be required to cease discharging liquid trade waste into council's sewerage system. Council may also consider issuing penalty infringement notice to a non-compliant discharger or may prosecute the discharger.

#### 3.3 Other applicable liquid trade waste charges

Additional fees and charges may be levied by council if wastewater is discharged to council's sewerage system from the following equipment and or processes, with council's approval.

- Food waste disposal units (ie. garbage grinders/insinkerators) <sup>4</sup>
- Solid food waste processing unit
- Discharge of stormwater to the sewerage system from large open areas or large quantities of groundwater

Refer to Appendix D for further details.

#### 3.4 Charges for premises with multiple liquid trade waste streams

Examples of premises with multiple waste streams include:

- shopping centres
- commercial strata units
- institutions, e.g. hospitals, tertiary educational facilities and correctional centres
- other premises with multiple waste streams,

Refer to Appendix D and the Liquid Trade Waste Management Guidelines 2021 for further details.

<sup>&</sup>lt;sup>4</sup> For existing installations only. New installations are not permitted.



#### 3.5 Summary of category specific fees and charges

The summary of fees and charges are indicated in Table 3 below:

Table 6: Summary of fees and charges

Fee/Charge	Category 1	Category 2	Category 3	Category 2S
Application fee	Yes <sup>5</sup>	Yes	Yes	Yes
Annual non-residential sewerage bill with appropriate sewer usage charge/kL	Yes	Yes	Yes	No
Annual liquid trade waste fee	Yes <sup>6</sup>	Yes	Yes	Variable <sup>7</sup>
Re-inspection fee (when required)	Yes	Yes	Yes	Optional <sup>8</sup>
Trade waste usage charge/kL	No	Yes	No	No
Human waste disposal charge/kL	No	No	No	Yes
Excess mass charges/kg	No	No	Yes	No
Non-compliance trade waste usage charge/kL	Yes <sup>9</sup>	Yes <sup>9</sup>	No	No
Non-compliance excess mass/kg and pH charges/kL (if required)	No	No	Yes	No

**Note**: Refer to Appendix D for other applicable charges not included in this Table.

#### 3.5.1 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. This includes property owners of marinas, caravan parks, etc.

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.

<sup>&</sup>lt;sup>9</sup> Non-compliance trade waste usage charge, if the discharger fails to install or properly maintain appropriate pre-treatment equipment. Refer to council's Management Plan



<sup>&</sup>lt;sup>5</sup> Not applicable for discharges listed as 'deemed to be approved'

<sup>&</sup>lt;sup>6</sup> May not be applicable for discharges listed as 'deemed to be approved'.

<sup>&</sup>lt;sup>7</sup>Refer to Appendix D for guidance on applying annual fees to category 2S discharges.

<sup>&</sup>lt;sup>8</sup> Applicable if re-inspection of facilities is required, e.g. ship-to-shore pump-out facility.

In relation to tankered human waste, transporters who collect and discharge waste at the STW are responsible for the payment. A waste transporter who tankers liquid trade waste to the STW may pay only the liquid trade waste fees and charges as non-residential sewerage fees are not applicable.

Note that a liquid trade waste discharger (except for tankered waste) pays both the non-residential sewerage charges and liquid trade waste fees and charges.

#### 4 Liquid trade waste service 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 some classification S discharges 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.

### 5 Enforcement of approvals and agreements

If the discharge is not approved or fails to comply with the approval conditions, the discharger is subject to prosecution and imposition of fines under the Local Government Act 1993 (under s. 626 and s. 627).

Above offences are also prescribed as penalty notice offences under the Act and Council may issue a penalty infringement notice (i.e. on the spot fine) to such discharger (Refer to Schedule 12 of the Local Government (General) Regulation 2021).

In addition to fines, council may recover costs of damages and fines incurred by council as a result of an unauthorised liquid waste discharge. Temporally suspension or cease the discharge may also be required.

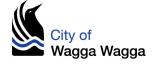
Note that sections 628 and 634 to 639 also list other offences related to water, sewerage and stormwater drainage.

Polluting of any waters by a liquid trade waste discharger who does not have a council approval or who fails to comply with the conditions of the approval is also 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 infringement notice to such a discharger.

#### 6 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 (refer to Appendix G) to waste or misuse water.

Dilution of liquid trade waste with water from any non-process source including council's water supply, bore water, groundwater, stormwater as a means of reducing pollutant concentration is therefore strictly prohibited.



### 7 Effluent improvement plans

Where the quality of 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 pretreatment facilities to improve the effluent quality and reliability.

#### 8 Due diligence programs and contingency plans

A discharger may be required to submit a due diligence program and a contingency plan for some liquid trade waste discharges (generally in concurrence classification C, charging category 3) 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 the time specified in the liquid trade waste approval.



## **Appendix A - Definitions**

**Authorised assumed concurrence**—councils with significant experience in liquid trade waste regulation are encouraged to apply to the Secretary, NSW Department of Climate Change, Energy, the Environment and Water seeking to obtain concurrence for council's approval for classification B and classification S discharges. If granted, council will no longer need to forward such applications to the department for concurrence, provided that council complies with the conditions outlined in the notice of concurrence.

**Automatic assumed concurrence**—council has been granted assumed concurrence for approval for classification A discharges, provided that council complies with conditions outlined in the notice of concurrence. Such applications may be approved by council without forwarding the application to the department for concurrence.

**Biochemical Oxygen Demand (BOD**<sub>5</sub>) —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 solids produced by sewage processing. Until such solids are suitable for beneficial use, they are defined as wastewater solids or sewage sludge.

Blackwater—wastewater containing human excrement (i.e. faeces, urine).

**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**—toilets in which wastes are deposited into a holding tank containing deodorizing or other chemicals. Stored wastes must be pumped out periodically.

**Commercial retail discharge**—commercial discharges can be described as wastes that are discharged from businesses dealing directly with the public.

**Commercial caterer**—a commercial caterer 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 does not apply to a food processing factory supplying pre-prepared meals to a third party.

**Council**—for the purpose of this document, "council" refers to a local government body (including Local Water Utility) which provides water supply and sewerage services in regional NSW

**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, leaks and spillages from stored products and chemicals.

**Concurrence**—under s. 90(1) of the *Local Government Act 1993* and cl. 28 of the Local Government (General) Regulation 2021, council must obtain the written concurrence of the Secretary of the NSW Department of Climate Change, Energy, the Environment and Water prior to approving the discharge of liquid trade waste to council's sewerage system. The department's Water Group provides concurrence on behalf of the Secretary.



**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 fails to meet the acceptance limits set down in council's approval conditions and/or liquid trade waste agreement. The document sets out measures taken by a discharger in order to meet the acceptance limits within the agreed timeframe.

**Fast food outlet**—a food retailing business featuring a very limited menu, precooked or quickly prepared food, and take-away operations. Premises of this nature include KFC, McDonalds, Red Rooster, Pizza Hut, Hungry Jack's, Burger King, etc.

**Galley waste**—liquid waste from a kitchen or a food preparation area of a vessel; not including solid wastes.

**Greywater**—wastewater from showers, baths, spas, hand basins, laundry tubs, washing machines, dishwashers or kitchen sinks.

**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**—a general term, which covers all waste minimisation activities connected within the premises as part of its operation.

**Industrial Discharges**—industrial liquid trade waste is defined as liquid waste generated by industrial or manufacturing processes. Examples are provided in the Liquid Trade Waste Management Guidelines 2021.

**Liquid Trade Waste**—all liquid waste other than sewage of a domestic nature discharged to the sewerage system.

**Mandatory Concurrence**—for the liquid waste in classification C, councils need to obtain concurrence for approval of each discharge. The Water Group of the Department of Climate Change, Energy, the Environment and Water provides concurrence on behalf of the department's Secretary.

**Methylene Blue Active Substances (MBAS)**—anionic surfactants. Their presence and concentration are detected by measuring colour change in a standard solution of methylene blue dye.

**Minimal Pre-treatment**—for the purpose of this document this means sink strainers, basket arrestors for sink and floor waste, plaster arrestors and fixed or removable screens.

**Mixed Business**—a general store that sells a variety of goods and may also prepare some food.

**Open Area**—any unroofed process, storage, washing or transport area where rainwater potentially can be contaminated.

Pan—any moveable receptacle kept in a closet and used for the reception of human waste.

**PFAS**—group of manufactured chemicals, containing a component with multiple fluorine atoms, with many specialty applications. Examples are perfluoro octane sulfonate (PFOS) and perfluorooctanoic acid (PFOA). They are used in a range of products, such as textiles, leather, cosmetics, non-stick coatings in cookware, food packaging, and in some types of fire-fighting



foam. These chemicals take a long time to break down in humans and the environment and their persistence and bioaccumulation potential pose concerns for the environment and for human health.

**Pit latrines/long-drop toilet/pit toilet**—a type of toilet that collects faeces and urine directly into a tank or a hole in the ground.

**Portable Toilet**—toilet in which wastes are deposited into a holding tank used on construction sites, caravans, motor homes, boats, trains and at outdoor gatherings. If chemicals are used to control odours, it is referred to as a chemical toilet.

**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.

**Premises**—has the same meaning as defined in the Local Government Act 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)
- 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.

**Regional NSW**—the areas of the state that are not serviced by the Sydney Water Corporation or the Hunter Water Corporation.

**Regulation**—Local Government (General) Regulation 2021 under the *Local Government Act* 1993.

**Secretary**—the head of the Department of NSW Department of Climate Change, Energy, the Environment and Water.

**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. It provides 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.

**Sewage Management Facility**—a human waste storage facility or a waste treatment device intended to process sewage and includes a drain connected to such a facility or device.

**Sewage of a Domestic Nature**—human faecal matter and urine and wastewater associated with ordinary kitchen, laundry and ablution activities of a household, but does not include waste in or from a sewage management facility.

**Sewerage System**—the network of sewage collection, transportation, treatment and byproducts (effluent and biosolids) management facilities.



**Sewage Treatment Works (STW)**—this is the facility designed to treat sewage. The level of treatment will vary based on the expected quality of the effluent.

**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.

**Sludge**—the solids that are removed from wastewater by treatment.

Stormwater Run-off—run-off resulting from rainfall.

**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.

Total Dissolved Solids (TDS)—total amount of dissolved material in the water.

**Total Recoverable Hydrocarbons (TRH)**—Both biological and petroleum hydrocarbons which have been extracted (recovered) from a sample. TRH are equivalent to the previously reported Total Petroleum Hydrocarbons (TPH). TRH is reported in fractions with Carbon chain  $(C_6 - C_{40})$ . TRH with carbon chain  $C_6 - C_{10}$  are flammable.

**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



## **Appendix B – Deemed to be Approved Activities**

The list of discharges exempt from obtaining of council's approval (ie considered as deemed to be approved) is shown in Table B1. Each such discharger must meet standard requirements specified in this Table.

Table B: 1 Discharges deemed to be approved

Activity generating waste	Requirements
Beautician	Solvents not to be discharged to sewer
Bed and Breakfast (not more than 10 persons including proprietor)	Sink strainers in food preparation areas Housekeeping practices (see Note 4)
Cooling tower <500L/h	No chromium-based products to be discharged to the sewer
Crafts ceramic, pottery, etc. (including hobby clubs)  • flows <200 L/d	Nil
• flows 200-1,000 L/d	Plaster arrestor required
Day care centre (no hot food prepared)	Sink strainers in food preparation areas  Housekeeping practices (see Note 4)  Nappies, wet wipes 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 technician	Plaster arrestor required
Dental mobile (no amalgam waste)	Nil
Dog/cat grooming/animal wash only	Dry basket arrestor for floor waste outlets and sink strainer required (see Note 3)
	Animal litter and any disposable waste products must not be discharged to sewer
	Organophosphorus pesticides are prohibited to be discharged to sewer
Florist	Dry basket arrestor for floor waste outlet and sink strainer required
	Herbicides/pesticides are not permitted to be discharged to sewer



Activity generating waste	Requirements	
Fruit and vegetable – retail	Dry basket arrestor for floor waste outlet and sink strainer required (see Notes 3 and 5)	
Hairdressing	Dry basket arrestor for floor waste outlet and sink strainer, hair trap	
Jewellery shop miniplater	Miniplater vessel to contain no more than 1.5 L of precious metal solution	
Jewellery shop ultrasonic washing	Nil	
Jewellery shop precious stone cutting	If: < 1000 L/d plaster arrestor required > 1000 L/d general purpose pit required	
*Medical centre/doctor surgery/physiotherapy *(Only if plaster cast are made onsite)	Plaster arrestor required, if plaster of paris casts are used	
Mixed business (minimal hot food)	Dry basket arrestor for floor waste outlet and sink strainer required (see Note 3)  Housekeeping practices (see Note 4)	
Mobile carpet cleaning	20-micron filtration system fitted to a mobile unit	
Mobile garbage bin washing	Dry basket arrestor for floor waste outlet required. Discharge via grease arrestor (if available)	
Motel (no hot food prepared and no laundry facility)	Dry basket arrestor for floor waste outlet and sink strainer required (see Note 3)	
	Housekeeping practices (see Note 4)	
Nut shop	Dry basket arrestor for floor waste outlet and sink strainer required (see Note 3)	
Optical service - retail	Solids settlement tank/pit required	
Pet shop – retail	Dry basket arrestor for floor waste outlet and sink strainer required (see Note 2)	
	Animal litter and any disposable waste products must not be discharged to sewer	
	Organophosphorus pesticides are prohibited to be discharged to sewer	



Activity generating waste	Requirements
Pizza reheating for home delivery	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 the activity is conducted outdoors, the work area is to be roofed and bunded to prevent stormwater ingress into the sewerage system.
- Dry basket arrestors must be provided for all floor waste outlets.
   a. Food preparation activities need to comply with sound housekeeping practices including:
  - b. Floor must be dry swept before washing
- 4. Pre-wiping of all utensils, plates, bowls etc. to the scrap bin before washing up
- 5. Use of a food waste disposal unit (garbage grinder) and/or a food waste processing unit (food waste digester, composter etc) is not permitted.



# Appendix C – Prohibited or restricted substances and wastes from discharge to sewer

This Appendix provides additional information regarding substances and waste either prohibited or restricted from being discharged to sewer (as indicated in Table 2 of this Policy).

## C1 Stormwater from open areas

The ingress of stormwater into the sewerage system can cause operational problems and result in sewer overflows, as the sewerage system does not have the capacity for such flows. Under clause 137A of the Regulation, the discharge of roof, rain, surface, seepage or groundwater to a sewerage system is prohibited unless specifically approved.

However, it may not be practical or feasible to totally prevent stormwater contamination and ingress into a sewerage system from some non-residential premises.

The discharge of limited quantities of stormwater (generally, 10 mm of rain) from sealed areas can be considered when roofing cannot be provided due to safety or other important considerations. In such instances, the applicant should take measures to minimise the contamination of stormwater and the volume of stormwater entering the sewerage system (e.g. first flush systems, flow separation, bunding, on-site detention, etc.). The discharge from unsealed areas is not permitted.

Refer to Liquid Trade Waste Management Guidelines 2021 for further information.

## C2 Contaminated groundwater

Similar to stormwater, discharge of groundwater or seepage water to a sewerage system is prohibited under clause 137A of the Regulation. Accordingly, groundwater extracted during construction activities (e.g. building/road construction activities, vacuum excavation, mining/exploration works, etc.) is not permitted to be discharged to council's sewerage system directly or indirectly.

However, groundwater previously contaminated by human activities (e.g. service station remediation sites) may be considered for discharge to the sewerage system. Limited quantities of groundwater from remediation projects may be accepted under controlled conditions after appropriate pre-treatment for a limited period.

## C3 Discharge of landfill leachate

The discharge of leachate from municipal waste landfills to the sewerage system may be considered under controlled conditions, if there is no other viable option of managing this waste and the discharge is within the council's acceptance limits.

The proponent when seeking approval to discharge leachate to sewer needs to demonstrate that a sound stormwater management plan has been developed and implemented. The plan needs to address:

- segregation of potentially contaminated areas from uncontaminated areas
- prevention of surface runoff entering leachate collection ponds/dams and to council sewerage system.



appropriate pre-treatment to meet council's acceptance limits.

Only the excess leachate after on-site management within the premise will be considered for sewer discharge, if it meets council's acceptance criteria. On-site pre-treatment to reduce ammonia levels (and other substances, e.g. PFAS) may also be required.

## C4 Discharge from float tanks

Float tanks, often referred to as floatation pods, iso-pods (isolation tank), sensory deprivation systems, or REST tanks (restricted environmental stimulation therapy tanks) are typically small, enclosed pods containing about 1,000 litres of water. This water usually contains large quantities of Epsom salts (300 - 700 kg of magnesium sulphate), resulting in total dissolved solids concentration up to 700,000 mg/L.

Discharge of such water to sewer is not permitted due to potential adverse impacts associated with the high salt content on the sewer infrastructure and treatment processes. It is also not appropriate to dispose of such waste to septic tanks or on-site soak wells.

If wastewater is proposed to be transported away for off-site management, the operator of such facilities must provide details of liquid waste transporters and written verification from the receival facilities acknowledging and agreeing to receive such wastewater.

# C5 Discharge from service station forecourts and other refuelling points C5.1 New premises

The discharge of wastewater from service station forecourts and other refuelling points (e.g. at bus depot, etc.) is not permitted.

Refer to NSW EPA Practice Note, titled *Managing Run-off from Service Station Forecourts*, June 2019, for options for managing such wastewater.

## C5.2 Existing premises

The discharge from existing service stations and other refuelling areas may be permitted, provided appropriate pre-treatment and discharge control requirements are adhered to. Further information is provided in Chapter 3 and Appendix F of the Liquid Trade Waste Management Guidelines 2021.

If a refuelling area is refurbished, then the discharge from this area must be disconnected from the sewerage system.

# C6 Discharges from liquefaction and/or pulverisation of solid waste by physical or chemical processes

The wastewater arising from liquefaction or pulverisation of solid waste by physical (e.g. pulping, macerating) or chemical means (e.g. dissolving solid waste in highly acidic or alkaline solutions) is not permitted to be discharged to the sewerage system.

Accordingly, discharges from the following devices/processes are not permitted.



- Macerators or similar devices used for pulverising of solid waste. Solid waste includes, but not limited to sanitary napkin, placenta, surgical waste, disposable nappies, mache bedpan/urine containers, food waste, disposable products and animal waste (dog/cat faeces, cat litter).
- **Food waste disposal units**, also known as in-sink food waste disposers or garbage grinders in commercial premises. Discharges from existing installations in hospitals and nursing homes may be permitted, provided that wastewater is discharged through an adequately sized grease arrestor (additional charges will be applied).
- If the kitchen is refurbished, the food waste disposal unit must be removed.
- Alkaline hydrolysis waste, process where a human or animal tissue is broken down
  using alkaline solutions at elevated temperatures and pH. The process may be used
  in animal care facilities, veterinary premises, animal research laboratories, funeral
  parlours etc. The generated wastewater is of a high strength and may exhibit high
  loadings on the sewerage system. Accordingly, the wastewater generated by this
  process is not permitted to be discharged to the sewerage system.

# C6.1 Discharge from Solid Food Waste Processing Units (digesters/composters, etc.)

Discharge from a solid food waste processing unit (digesters/composters, etc) to a council's sewerage system is a concurrence classification C discharge (i.e. charging category 3), hence council needs to obtain concurrence to its approval from the department for individual applications.

The quality of wastewater from this equipment depends on the type of solid waste feed into it and the effectiveness of the on-site pre-treatment, hence frequent sampling will be required for monitoring and charging purposes. Sampling needs to be undertaken by either a council officer or an independent party acceptable to council.

Appropriate on-site pre-treatment needs to be provided prior to combining with any other liquid waste stream that discharges to the council's sewerage system.

Each application will be assessed on a case-by-case basis.

## C7 Use of additives in pre-treatment systems

The use of bacterial, enzyme and/or odour controlling agents in pre-treatment equipment (eg. in grease arrestors) is prohibited unless specifically approved by council with the department's concurrence.

## C8 Discharge of disposable products marketed as flushable

Any disposable solid products including those marketed as "flushable" (eg. wet wipes, cleaning wipes, cat litter, etc.) are not permitted to be flushed down the sewerage system.

Contrary to manufacturers' claims, flushable wet wipes do not breakdown in the sewerage system similarly to a toilet paper and may cause blockages within the premises or in the council's sewerage system and may cause raw sewage overflow to the environment.



# Appendix D - Non-residential sewerage and liquid trade waste fees and charges

This Appendix provides information on council's charging criteria for liquid trade waste customers. Some guidance is also provided on the applicable non-residential sewerage charges.

The sound pricing for non-residential sewerage and liquid trade waste services is to ensure that liquid trade waste dischargers pay a fair share of the cost of sewerage services provided by council. Appropriate pricing is essential to provide relevant signals to non-residential and liquid trade waste customers to use water efficiently and to minimise the use of associated sewerage infrastructure.

## D1 Non-residential sewerage pricing

Non-residential properties are charged one access charge per property, based on the diameter of the property's water meter. The minimum charge must not be less than the residential access charge. In addition, usage-based charges apply based on the metered volume with a discharge factor applied.

Non-residential sewerage bills must not be less than the residential sewerage bill and should be based on a cost-reflective two-part tariff with an annual access charge and a uniform sewer usage charge per kilolitre. The sewerage access charge should be proportional to the size of the water supply connection to reflect the load that can be placed on the sewerage system and the sewer usage charge per kilolitre should apply for the estimated volume discharged to the sewerage system.

The mechanism for the charging is set out in the Sewer Policy (Pol 036) and Councils adopted Fees and Charges.

Access charge

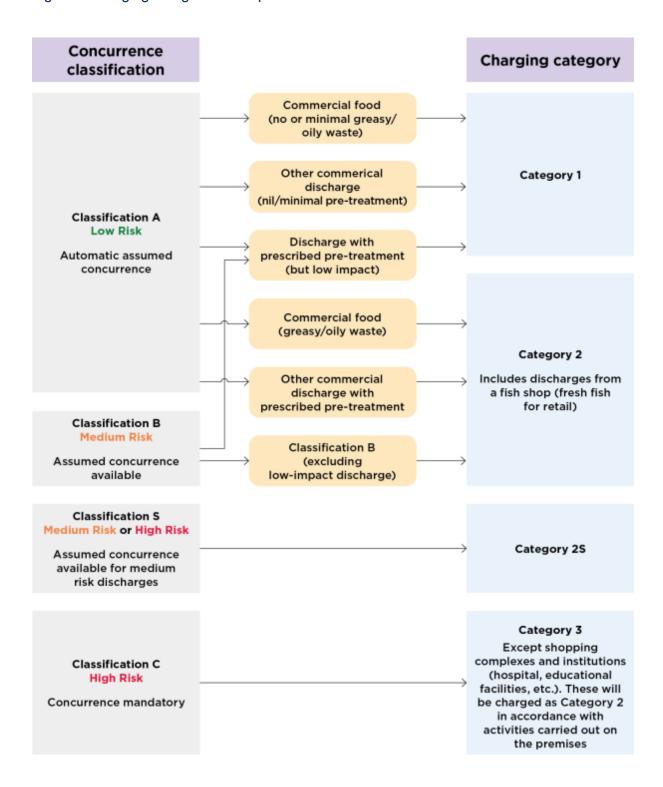
Sewer Usage charge

## D2 Liquid Trade Waste fees and charges

This section describes various fees and charges associated with liquid trade waste and fees and charges applicable to charging categories. Figure 1 shows the relationship between concurrence classifications and charging categories.



Figure 1 Charging categories for liquid trade waste



In summary, classification A discharges fall into charging category 1 or category 2. Classification B discharges fall into charging category 2, except for a few discharges with low impact on the sewerage system which fall into category 1. Classification S discharges fall into charging category 2S and classification C discharges fall into charging category 3.



## D2.1 Description of various trade waste fees and charges

## D2.1.1 Application fee

The application fee recovers the costs of administration and technical services provided by council in processing a liquid trade waste application. This fee varies for different charging categories to reflect the complexity of processing the application.

#### D2.1.2 Annual trade waste fee

The purpose of this fee is to recover the costs incurred by council for ongoing administration and scheduled inspections, to ensure that the discharge complies with the approval conditions.

As part of an inspection, council may undertake monitoring which may include, but is not limited to, flow measurement and the sampling. In general, cost of one inspection is included in the annual fee, in particular for category 1 and 2 discharges.

The annual liquid trade waste fee varies for different charging categories in order to reflect the complexity of their inspection and administration requirements. For category 3 discharges, council may opt to set the annual fee on a case-by-case basis to reflect the complexity of monitoring requirements and the extent of inspection.

Refer to section D8.4 with regard to annual fees applicable to premises with **multiple activities**.

Council may require a discharger to pay for monitoring (quantity and quality) based on full cost recovery.

## D2.1.3 Inspection fee/re-inspection fee

Cost of one inspection is usually included in the annual liquid trade waste fee for charging categories 1 and 2.

However, it may be required to conduct un-planned inspections or re-inspections of a premise (e.g. non-compliance with approved conditions, investigating an accident, etc.). Also, more frequent inspections may be necessary for large and industrial discharges.

Where **more than one inspection** is undertaken in a financial year and/or the cost of inspections is not included in the annual fee, the cost may be recovered from the discharger as the re-inspection fee.

Council may recover the cost of sample analysis from the discharger, in addition to the reinspection fee.

#### D2 1.4 Renewal fee

Council may apply a renewal fee if an existing approval needs to be renewed or modified.

## D2.1.5 Category specific charges

The following sections describe the charging categories and relevant fees and charges. If a discharge is not listed, council will determine (with consultation of the department) the relevant charging category, based on the quality and the quantity of discharge.



## D3 Category 1 discharger

This charging category includes:

- Classification A discharges (both commercial retail non-oily/greasy food preparation and other commercial discharges, listed below)
- Classifications B discharges identified as low risk.

Some of the above discharges may require prescribed pre-treatment to be installed however, the treated effluent is considered to have a low impact on the sewerage system.

Classification A discharges – commercial retail food preparation activities that do not generate or generate minimal oily/greasy waste: bakery (only bread baked on-site), bistro (sandwiches, coffee only), boarding house/bed and breakfast/hostel kitchen < 10 persons, café/coffee shop/coffee lounge (no hot food), canteen/cafeteria (no hot food), community hall/civic centre (minimal food), day care centre (minimal hot food), delicatessen (minimal or no hot food), fruit and vegetable shop, hotel/motel (minimal hot food), ice cream parlour (take away only), juice bar, mobile food van (no hot food), mixed business (minimal hot food), nightclub (no hot food), nut shop, pie shop (re-heating only), pizza no cooking/reheating (pizza heated and sold for consumption off-site), potato peeling (small operation), sandwich shop/salad bar/snack bar (no hot food), take away food outlet (no hot food), school canteen with minimal hot food.

Classification A discharges from other commercial activities: animal wash, beautician/tanning booths/hairdressing, crafts ≤ 1,000 L/d, dental surgery/dental technician (plaster casts), dry cleaning, florist, funeral parlour, jewellery shop, medical centre/physiotherapy (plaster casts), mobile cleaning units, morgue, optical service, pet shop, plants retail (no nursery), non-residential swimming pool/hydrotherapy, veterinary.

Classification A or B discharges with prescribed pre-treatment and low impact on the sewerage system: boiler blowdown, cooling tower, industrial boilers, laboratory (analytical/pathology/tertiary institution), laundry/laundromat, primary and secondary school 10, vehicle washing/detailing (excluding truck washing).

## D3.1 Category 1 discharger - Liquid trade waste charges

## D3.1.1 "Deemed to be approved" discharges

For a discharger in "deemed to be approved discharges" (refer to appendix B), the following charges will be applicable.

## D3.1.2 Category 1 discharger, other than "deemed to be approved"

Category 1 discharger who installs recommended appropriate pre-treatment equipment and maintains them regularly will be required to pay **only** the annual fee nominated for category 1.

Liquid trade waste bill for category 1 discharger (TW<sub>1</sub>)  $TW_1 = A_1$ 

A<sub>1</sub> = Annual liquid trade waste fee (\$) for category 1

<sup>&</sup>lt;sup>10</sup> If significant hot food preparation is carried out, category 2 charges may be levied by council.



## D4 Category 2 discharger

Category 2 liquid trade waste dischargers are those discharging waste generated by an activity listed below:

Classification A discharges – commercial retail food preparation/serving activities that generate oily/greasy waste: bakery (pies, sausage rolls, quiches, cakes, pastries with creams or custards), bistro, boarding house/bed and breakfast/hostel kitchen (exceeding 10 persons), butcher, café/coffee shop/coffee lounge (with hot food), cafeteria/ canteen (with hot food), chicken/poultry shop –fresh/roast, retail BBQ/charcoal chicken, day care centre with hot food, club, civic centre/community hall<sup>11</sup>, commercial kitchen/caterer, delicatessen with hot food, fast food outlet, fish shop (retail and cooking on-site), function centre, hotel, ice cream parlour, mixed business (hot food), mobile food van (base), motel, nightclub, nursing home, patisserie, pizza cooking, restaurant, sandwich shop/salad bar/snack bar (with hot food), supermarket, take away food outlet with hot food, school canteen with hot food.

**Classification A discharges – other commercial discharges**: car detailing, craft activities > 1000 L/d, lawnmower repairs, mechanical workshop, stone working, surfboard manufacture (wet process only).

Classification B discharges: auto dismantler, bus/coach depot, bakery (wholesale), butcher (wholesale) construction equipment maintenance and cleaning, boutique or artisan foods, engine reconditioning, equipment hire, maintenance and cleaning, fish co-op, graphic arts, hospital, micro-brewery, oyster processing – shucking, panel beating, radiator repairer, screen printing, service station forecourt, shopping complex, truck washing (platforms/flat beds) and truck washing (external).

## D4.1 Category 2 discharger - liquid trade waste charges

A category 2 discharger who installs and maintains appropriate pre-treatment equipment will pay the annual fee nominated for category 2 plus the trade waste usage charge.

Liquid trade waste bill for category 2 discharger (TW<sub>2</sub>),

 $TW_2 = A_2 + Q_{TW} \times C_2$ 

A<sub>2</sub> = Annual liquid trade waste fee (\$) for category 2

Q<sub>TW</sub> = Total liquid trade waste discharge volume (kL)

 $C_2$  = Trade waste usage charge (\$/kL)

The liquid trade waste discharge volume is generally estimated by applying a trade waste discharge factor (TWDF) to the total water consumption unless a discharge meter is installed.

<sup>&</sup>lt;sup>11</sup> If the type and size of kitchen fixtures installed enable catering for large functions.



## D5 Category 2S discharger

Category 2S dischargers include:

- transporters who tanker human waste to council's STWs septic tank waste (effluent and septage), ablution block waste (blackwater and greywater), portable toilet waste, sludge from on-site aerated wastewater treatment systems (AWTS) for single households, waste from pit toilets, night soil.
- **owners/operators of 'dump points'** directly connected to the sewer for disposal toilet waste and/or grey water from a bus or a recreation vehicle (RV), e.g. caravan, motor home.

## D5.1 Category 2S discharger - liquid trade waste charges

## D5.1.1 Transported human waste

The transporters of human waste will be required to pay a waste disposal charge (\$/kL).

Liquid trade waste bill for category 2S waste transporter (TW<sub>TW</sub>),

 $TW_{TW} = A_{TW} + Q_{TW} \times C_{TW}$ 

 $A_{TW}$  = Annual fee (\$) for transported waste (if nominated by council)

 $Q_{TW}$  = Transported human waste volume (kL)

C<sub>TW</sub> = Charging rate (\$/kL) for the transported waste (may vary based on the type of waste transported)

## D6 Category 3 discharger

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 of liquid trade waste to the sewerage system. Any category 1 or 2 discharger whose volume exceeds the limits shown below becomes a category 3 discharger (excluding shopping centres and institutions):

Classification A discharge > 20 kL/d

Classification B discharge – as shown in chapter 5 of the guidelines.

Classification C discharges include: abattoir, acid pickling, adhesive/latex manufacture, agricultural and veterinary drugs, anodising, bitumen and tar, bottle washing, brewery, cardboard and carton manufacture, carpet manufacture, caustic degreasing, chemicals treatment, manufacture repackaging, contaminated cooling and site cosmetics/perfumes manufacture, cyanide hardening, dairy processing\* (milk/cheese/yoghurt/ice cream, etc.), detergent/soaps manufacture, drum washing, egg processing, electroplating, extrusion and moulding (plastic/metal), feather washing, fellmonger, felt manufacture, fertilisers manufacture, fibreglass manufacture, filter cleaning, (cereals/cannery/condiments/confectionary/edible foundry, food processing\* oils/fats/essence/flavours/fish/fruit juice/gelatine/honey/meat/pickles/smallgoods/tea coffee/vinegar/yeast manufacture, etc.), food waste processing unit (digester/composter), fruit and vegetable processing, flour milling, galvanising, glass manufacture, glue manufacturer, ink manufacture, laboratories (excluding those in Category 1 & 2), liquid wastewater treatment facility (grease trap receival depot and other pump-out waste depot), metal finishing, metal cyanide (refining/rumbling/non treatment/phosphating/photo processing heat engraving/printed circuit etching/sheet metal fabrication etc.), mirrors manufacture, oil



recycling (petrochemical) and refinery, paint stripping, paint manufacture, paper manufacture, pet food processing, plants nursery (open areas), pharmaceuticals manufacture, plaster manufacture, powder coating, potato processing, poultry processing, printing (newspaper, lithographic), saleyards, sandblasting, seafood processing, slipway, soft drink/cordial manufacture, starch manufacture, sugar refinery, tanker washing, tannery, timber processing (joinery and furniture/plywood/hardwood), textile manufacture (wool dyeing/spinning/scouring), tip leachate, transport depot/ terminal, truck washing (internal), waxes and polishes, water treatment backwash, wholesale meat processing, winery, distillery, wine/spirit bottling.

\* Excluding small boutique, craft or artisan food industries not exceeding the discharge volume shown in the *Liquid Trade Waste Management Guidelines*, 2021.

## D6.1 Category 3 discharger - liquid trade waste charges

## D6.1.1 Excess mass charges

Category 3 discharger will be required to pay the annual liquid trade waste fee plus excess mass charges.

Liquid trade waste bill for a category 3 discharger (TW<sub>3</sub>),

 $TW_3 = A_3 + EMC$ 

A<sub>3</sub> = Annual liquid trade waste fee (\$)\*\*

EMC = Excess mass charges (\$)

**Note**: \*\*Annual fee may vary for different business activities, depending on the complexity and time taken for inspection.

#### How excess mass charges are calculated

Excess mass charges will be applicable for substances discharged in excess of the 'deemed concentrations' in domestic sewage. For the purpose of excess mass charge calculation, the deemed concentrations of substances in domestic sewage are listed in Table D1.

Table D1: Deemed concentration of substances in domestic sewage

Substance	Concentration (mg/L)
Biochemical Oxygen Demand (BOD <sub>5</sub> )	300
Suspended Solids	300
Total Oil and Grease	50
Ammonia (as Nitrogen)	35
Total Kjeldahl Nitrogen	50
Total Phosphorus	10
Total Dissolved Solids	1000



Substance	Concentration (mg/L)
Sulphate (SO <sub>4</sub> )	50#

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

**NB**. Substances not listed above are deemed not to be present in domestic sewage.

For excess mass charge calculation, equation (1) below will be applied for all parameters including for  $BOD_5$  up to 600 mg/L (but excluding COD and pH).

$$EMC(S) = \frac{(S - D) \times Q_{TW} \times U}{1,000}$$
 (1)

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

 $\mathsf{D} = \mathsf{Concentration} \; (\mathsf{mg/L}) \; \mathsf{of} \; \mathsf{substance} \; \mathsf{deemed} \; \mathsf{to} \; \mathsf{be} \; \mathsf{present} \; \mathsf{in} \; \mathsf{domestic} \; \mathsf{sewage}$ 

Q<sub>TW</sub> = Volume (kL) of liquid trade waste discharged to the sewerage system

U = Unit charging rate (\$/kg) for the substance (note that this rate varies from substance to substance. Refer to council's annual Management Plan for charging rates for various substances)

#### D6.1.2 Excess mass charges for BOD

#### BOD up to 600 mg/L

Equation (1) applies for BOD<sub>5</sub> up to 600 mg/L. Note that there are no excess mass charges if the BOD does not exceed 300 mg/L (deemed concentration of BOD in domestic sewage).

#### Excess mass charges for BOD exceeding 600mg/L

If council approves the acceptance limits for  $BOD_5$  higher than 600mg/L, an exponential type equation will be used for calculation of the charging rate  $U_e$  (\$/kg) as shown in equation (2). This provides a strong incentive for dischargers to reduce the strength of waste. Note that equation (5) will be used where the discharger has failed to meet their approved BOD limit on more than two instances in a financial year.

U<sub>e</sub> is the excess mass charging rate U<sub>e</sub> (\$/kg) for BOD is calculated as:

$$U_{e=2C} \times \frac{\frac{(Actual\ BOD-300mg/L)}{600mg/L}}{\frac{600mg/L}} \times 1.05 \frac{\frac{(Actual\ BOD-600mg/L)}{600mg/L}}{\frac{600mg/L}}$$
 Where: C = Charging rate (\$/kg) for BOD $_{5}$  600mg/L Actual BOD = Concentration of BOD $_{5}$  as measured in a sample

## D6.2 Tankered category 3 waste

In some instances, liquid waste that falls into charging category 3 is transported to the STW. Examples of such waste may include tankered landfill leachate or dairy waste from unsewered areas. In such instances, council will determine the appropriate approval holder (waste generator or the transporter) and invoice accordingly.



## D7 Non-compliance liquid trade waste charges

If the discharger has not installed or maintained appropriate pre-treatment equipment, the following non-compliance trade waste usage charges will be applied for the relevant billing period:

## D7.1 Category 1 and Category 2 discharger - non-compliance charges

If a discharger has not installed or maintained appropriate pre-treatment equipment a non-compliance charge as outlined in councils adopted fees and charges will be applied.

## D7.2 Non-compliance charges for category 3 discharger

If a discharger in charging category 3 fails to comply with the acceptance limits specified in council's approval conditions, the following non-compliance charges will be applicable.

## D7.2.1 Non-compliance pH charge

If the pH of the waste discharge from category 3 dischargers is outside the approved range, equation (3) is used for the calculation of non-compliance pH charges. This equation provides an incentive for dischargers to install and properly maintain a pH correction system, so their waste remains within the approved pH limits.

Charging rate for pH, if outside the approved range =

K x | actual pH – approved pH|
$$^{\#}$$
 x 2 | $^{actual pH - approved pH}$  $^{\#}$  (3)

# Absolute value to be used.

K = pH coefficient in \$

#### Example:

Council has approved the pH range 7.0 to 9.0 for a large discharger. pH coefficient (K) listed in council's Management Plan is \$0.45

Case 1: pH measured 6.0

Charging rate for pH (\$/kL) = 0.45 x | 6 - 7| \* x 2 | 6-7| \* = \$0.90/kL

Case 2: pH measured 11.0

Charging rate for pH (\$/kL) = 0.45 x | 11 - 9| \* x 2 | 11 - 9| \* = \$3.60/kL

# Absolute value to be used.

## D7.2.2 Non-compliance excess mass charges

Equation (4) shall apply for non-compliance excess mass charges for various substances, except for BOD<sub>5</sub> where equation (5) shall apply to calculate the charging rate.

Non – compliance Excess Mass Charges (\$) = 
$$\frac{(S-A) \times Q \times 2U}{1000} + \frac{(S-D) \times Q \times U}{1000}$$
 (4)

Where: S = Concentration (mg/L) of a 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 the substance, as shown in council's annual Management Plan
- D = Concentration (mg/L) of the substance deemed to be present in domestic sewage

## D7.2.3 Non-compliance excess mass charges for BOD

The non-compliance excess mass charging rate  $(U_n)$  for BOD<sub>5</sub> is calculated by using equation (5):

U<sub>n</sub> is the BOD₅ non-compliance excess mass charging rate in (\$/kg).

$$U_{n} = 2C \times \frac{(A-300mg/L)}{600mg/L} \times 1.05^{(A-600mg/l)/600mg/L} + 4C \times \frac{(Actual\ BOD-A)}{600mg/L} \times 1.05^{\frac{(Actual\ BOD-A)}{600mg/L}} (5)$$

## D8 Other applicable liquid trade waste charges

## D8.1 Garbage grinders - food waste disposal charge<sup>12</sup>

Additional charges will apply for a food waste disposal unit (in-sink food waste disposers/garbage grinders) in an **existing** hospital, nursing home or other eligible facility where council has permitted such installation.

These charges are in addition to category specific liquid trade waste fees and charges (e.g. Category 2 charges plus U<sub>F</sub>).as shown below:

Food waste disposal charge (\$) = B x U<sub>F</sub>

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

U<sub>F</sub> = Annual charging rate (\$/bed) for a food waste disposal unit at a hospital or nursing home.

## D8.2 Solid food waste processing unit

Discharge of waste from a solid food waste processing unit (digester/composter) is classified as concurrence classification C and is in charging category 3.

Excess mass charges for all parameters in excess of the deemed concentrations in domestic sewage and non-compliance charges, above the council's acceptance limits, will be applicable to the waste stream from such equipment (refer s. D6.1.for further information).

In addition, the discharger needs to bear the cost of frequent sampling as the quality of the wastewater will be dependent on the solid waste input to the processing unit and the effectiveness of the on-site pre-treatment equipment.

<sup>&</sup>lt;sup>12</sup> For existing installations of garbage grinders only. New installations are not permitted.



## D8.3 Discharge of stormwater from large open areas or large quantities of groundwater to the sewerage system

The discharge of roof, rain, surface, seepage or ground water to the sewerage system is prohibited under clause 137A of the Local Government (General) Regulation 2021 and this policy. Consideration will be given to the acceptance of limited quantities of contaminated stormwater (first flush stormwater) based on a case-by-case assessment.

If stormwater run-off from a large areas or groundwater is approved for discharge to sewer for a category 3 discharger (e.g. saleyards), a volume-based charge similar to the non-compliance usage charging rate (\$/kL) for Category 2 will be applied (e.g. 5 to 10 times of the usage charging rate listed in council's Management Plan. Excess mass charges may also be applied to such discharges.

## D8.4 Charges for premises with multiple liquid trade waste streams

Examples of premises with multiple waste streams include:

- shopping centres
- commercial strata units
- institutions, e.g. hospitals, tertiary educational facilities and correctional centres
- other premises with multiple waste streams, e.g. premises comprising food cooking/serving activities and "boutique/artisan food" businesses. For example, a liquid trade waste application may include a restaurant or a hotel, a microbrewery, a chocolate making and/or a cheese making shop, all located on the same site.

## D8.4.1 Shopping centre

Council will apply trade waste usage charge based on the estimated trade waste discharge volume.

#### D8.4.2 Commercial strata title units

Councils will issue individual liquid trade waste bills to each owner of the strata title unit.

## D8.4.3 Hospitals, tertiary educational facilities and correctional centres

Council will generally issue a liquid trade waste bill to the management of the above premises.

Council will apply a trade waste usage charge based on the estimated trade waste discharge volume.

If food preparation activities are carried out by an outside contractor, e.g. take away food outlets in the educational facilities, council may issue a separate liquid trade waste bill to such individual shops, where practical. It may require an individual water meter or a check meter to be installed at the relevant service line.

## D8.4.4 Other premises with multiple waste streams

There are some premises where various "boutique type" businesses are located on the same site as restaurants, café, etc. For example, a premise may include a restaurant, a microbrewery, a chocolate making shop and a cheese making business, all owned by the same owner. When a liquid trade waste application includes a few different activities on the same site, council will assess the application and determine the relevant charging categories and applicable fees and charges.



## Appendix E – List of discharges council may approve

## E1 Classification A

Discharges from activities that council can process without seeking department concurrence, subject to complying with certain requirements.

Food preparation/serving, generating liquid waste, up to 16 kL/day	Other activities generating liquid waste, up to 5 kL/day	
Bakery (retail)	Animal wash (pound, stables, racecourse, kennels, mobile animal wash)	
Bed and Breakfast (<10 persons)	Beautician	
Bistro	Boiler blowdown	
Boarding house/hostel kitchen	Car detailing	
Butcher (retail)	Cooling towers	
Café/coffee shop/coffee lounge	Craft activities (pottery, ceramics, cutting and polishing of gemstones or making of jewellery)	
Canteen	Dental surgery	
Cafeteria	Dental technician	
Chicken/poultry shop (fresh chicken/game, retail, barbeque/roast chicken)	Dry-cleaning (separator water, boiler)	
Club (kitchen wastes)	Florist	
Commercial kitchen/caterer	Funeral parlour/morgue	
Community hall/civic centre/function centre (kitchen waste)	Hairdressing	
Day care centre	Jewellery shop	
Delicatessen	Laboratory (pathology/analytical)	
Doughnut shop	Laundry or laundromat (coin operated)	
Fast food outlets (McDonalds, KFC, Burger King, Hungry Jack, Pizza Hut, Red Rooster, etc.)	Lawnmower repairs	



Food preparation/serving, generating liquid waste, up to 16 kL/day	Other activities generating liquid waste, up to 5 kL/day	
Fish shop (retail—fresh and/or cooked)	Mechanical repairs/workshop	
Fruit and vegetable shop (retail)	Medical centre/doctor surgery/physiotherapy— plaster of paris casts, laboratory	
Hotel	Mobile cleaning units	
Ice-cream parlour	Nursing home (other than food-related activities)	
Juice bar	Optical services	
Mixed business	Pet shop (retail)	
Mobile food van	Photographic tray work/manual development	
Motel	Plants retail (no nursery or open space)	
Nightclub	School (other than kitchen waste)	
Nursing home kitchen	Stone working	
Nut shop	Surfboard manufacturing (wet process only)	
Patisserie	Swimming pools/spas/hydrotherapy pools	
Pie shop	Vehicle (car) washing (by hand/wand, automatic car wash/bus wash/external truck wash or underbody/engine degrease only)	
Pizza shop	Venetian blind cleaning	
Restaurant	Veterinary surgery	
Salad bar		
Sandwich shop		
School – canteen, home science		
Snack bar		
Supermarket (with butcher/bakery/delicatessen/seafood or roasted chicken)		
Take away food shop		



## Appendix F - Legislative provisions

Provisions in the Local Government (General) Regulation 2021 regarding acceptance of liquid trade waste into the sewerage system. The following are direct quotes from the relevant sections of the Regulation.

#### Clause 25 Matters to accompany applications relating to discharge into sewers

An application for approval to discharge trade waste into a sewer under the control of a council or that connects with such a sewer must be accompanied by the information required by Table 1 of the Liquid Trade Waste Management Guidelines<sup>#</sup>.

#### Clause 28 Approval to discharge waste into sewers: concurrence required

A council must not grant an approval under <u>section 68</u> of <u>the Act</u> to discharge trade waste (whether treated or not) into a sewer of the council unless the Secretary (or the Secretary's nominee) has concurred with the approval.

**Note:** Section 90 (2) of the Act permits any person or authority whose concurrence is required before an approval may be granted to give the council notice that the concurrence may be assumed (with such qualifications or conditions as are specified in the notice).

#### Clause 32 Disposal of trade waste

- 1. An approval to dispose of trade waste into a sewer of the council is subject to such conditions (if any) as the council specifies in the approval.
- 2. In imposing any such conditions, the council is to have regard to the matter set out in Table 5 of the Liquid Trade Waste Management Guidelines.
- 3. Clause 159 Prevention of waste and misuse of water

The owner, occupier or manager of premises to which water is supplied by the council must:

- a. prevent waste of water by taking prompt action to repair leaking taps, pipes or fittings located on the premises, and
- b. take any other action that is reasonable to prevent waste and misuse of water.

#### 137A Substances prohibited from being discharged into public sewers

- 1. For the purposes of <u>section 638</u> of <u>the Act</u> (Discharge of prohibited matter into sewer or drain), roof, rain, surface, seepage or ground water is prescribed as prohibited matter.
- 2. This clause does not apply in relation to:
  - a. a discharge that is specifically approved under section 68 of the Act, or
  - b. a discharge into a public drain or a gutter of a council, or
  - c. a discharge in an area of operations within the meaning of the <u>Sydney Water Act 1994</u> or the <u>Hunter Water Act 1991</u>.



#### 143 Inspection of pipes and drains and measurement of water and sewage

- 1. The council may, at any reasonable time:
  - a. inspect any service pipe connected to a water main, and
  - b. inspect any drain connected to a sewer main, and
  - c. install meters or other devices for measuring the quantity of water supplied to, or the quality and quantity of sewage discharged from, premises, and
  - d. measure the quantity of water supplied to, or the quality and quantity of sewage discharged from, premises, and
  - e. inspect any pre-treatment devices connected to the council's sewerage system.
- 2. The occupier of the relevant premises must provide to the council such information as it requires to enable it to estimate the quantity of water actually supplied to, or the quality and quantity of sewage actually discharged from, the premises.
- 3. In this clause, "pre-treatment device" means any device used to reduce or eliminate contaminants in trade waste, or to alter the waste's nature, before it is discharged into a sewer.

### SCHEDULE 12 – Penalty notice offences

Column 1	Column 2
Offence under Local Government Act 1993	Penalty
Section 626 (3)-carry out without prior approval of council an activity specified in item 4 of Part C (Management of waste) of the Table to section 68	\$330
Section 627 (3)-having obtained the council's approval to the carrying out of an activity specified in item 4 of Part C (Management of waste) of the Table to section 68, carry out the activity otherwise than in accordance with the terms of that approval	\$330

<sup>&</sup>lt;sup>#</sup> "Liquid Trade Waste Management Guidelines" means the Guidelines of that name produced by the Department of Energy, Utilities and Sustainability in March 2005, as in force from time to time. The 2005 Guidelines have now been superseded by the *Liquid Trade Waste Management Guidelines*, 2021.



## **Revision History**

Revision number	Council resolution	Council meeting date
1	Res No: 09/077	27 July 2009
2	Res No: 11/066.4	28 2011
3	E Team	07/05/2013
4	Res No: 13/224.1	26/08/2013
5	E Team	03/12/2013
6	E Team	19/01/2016
7	Res No: 17/279	28/08/2017
8	Res No: 22/354	17 October 2022
9	General Manager under delegated authority	27 May 2025

