

Water: Discharge of Liquid Trade Waste

CEOM7046

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1.0 PURPOSE

Essential Energy is Australia's largest regional utility business. As a water business we are committed to providing safe, secure, reliable and high-quality water to our customers. Our aim is to incorporate effective water cycle management into everything we do by ensuring we operate in accordance with CECP1001 Drinking Water Policy.

Essential Energy may apply to the Minister for approval of a policy with respect to the discharge of substances into its sewerage system, under the *Water Management Act 2000* and associated regulations. The commonly used term "Liquid Trade Waste" or "Trade Waste", will be used throughout this document to describe the "Substances Discharged to Sewer".

The *Water Management Act 2000* and its regulations underpin the approval process. Essential Energy may describe substances that are prohibited from being discharged to the sewerage system, may vary, or revoke the conditions or may impose further conditions on a discharge approval.

Sewerage systems are generally designed to cater for waste from domestic sources that are essentially of predictable strength and quality. Essential Energy **may** accept trade waste into its sewerage system as a **service** 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, Essential Energy'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
- Sewer treatment facilities may not be able to handle and treat the waste or may result in excessive costs to treat the waste to acceptable standards.

This Policy is concerned with the approval process for liquid trade wastes discharged into Essential Energy's sewerage system. It has been developed to ensure the proper control of liquid trade waste discharged to the sewerage system and hence protection of public health, worker safety, the environment, and Essential Energy's sewerage system. The Policy also promotes waste minimisation and water conservation.

A person wishing to discharge liquid trade waste to the sewerage system must, under clause 148 of the *Water Management (General) Regulation 2018*, obtain prior approval from Essential Energy. Discharging liquid trade waste without an approval is an offence under the Regulation.

1.1 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 (e.g., beautician, florist, hairdresser, hotel, motel, restaurant, butcher, service station, supermarket, dentist)
- Community/public premises (including craft club, school, college, university, hospital and nursing home)

- Industrial premises
- Trade activities (e.g. mobile carpet cleaner)
- Any commercial activities carried out at a residential premise; and
- Saleyards, racecourses and from stables and kennels that are not associated with domestic households.

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 (i.e., domestic sewage)
- Common use (non-residential) kitchen and laundry facilities in a caravan park
- Residential swimming pool backwash; and
- While septic tank waste, chemical toilet waste, waste from marine pump out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system are defined as trade waste, this document does not address the management of such wastes. (These substances are generally not accepted by Essential Energy in Broken Hill and are the responsibility of the Local Council unless arrangements are made for the acceptance of such substances. Essential Energy will seek written administrative advice from DPE and that it will have regard to that advice in determining whether to approve such applications).

* Used for personal hygiene only.

1.2 Objectives

The objectives of this policy are to:

- Protect public health
- Protect the health and safety of Essential Energy employees
- Protect the environment from the discharge of waste that may have a detrimental effect
- Protect Essential Energy assets from damage
- Minimise adverse impacts on Essential Energy's sewage treatment processes
- Assist Essential Energy to meet its statutory obligations
- Provide an environmentally responsible liquid trade waste management service to the non-residential sector
- Encourage waste minimisation and cleaner production in the commercial and industrial sectors
- Promote water conservation
- Ensure that reuse of the sewage treatment works effluent or bio-solids is feasible
- Ensure compliance of liquid trade waste discharge with the approved conditions
- Provide operational data on the volume and composition of industrial and commercial effluent to assist in the operation of the sewerage system and the design of augmentations or new sewerage systems; and
- Ensure commercial provision of services and cost recovery through appropriate sewerage and liquid trade waste fees and charges.

The above objectives are consistent with the National Framework for Sewage Quality Management in the Australian Sewage Quality Management Guidelines, June 2012, Water Services Association of Australia (WSAA).

1.3 Actions and Responsibilities

The Senior Plumbing Inspector is responsible for the assessment, approval and inspection of all liquid trade waste dischargers.

The Water Business Team is responsible for the Fees and Charges associated with Liquid Trade Waste Discharge.

2.0 STRUCTURE OF THE POLICY

This Policy comprises three 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 Essential Energy will take into consideration in determining whether to give or refuse a liquid trade waste approval; and
- **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, alignment with the National Framework for Wastewater Source Management and other relevant information.

2.1 Part 1 – Exemptions

The list of discharges exempt from obtaining of Essential Energy's approval is provided in Annexure A. These discharges are known as 'Deemed to be approved'. Each such discharger must meet the standard requirements specified in Annexure A.

Where a commercial business activity has been exempted from the requirements to obtain Essential Energy's approval to discharge liquid trade waste to the sewer system, Essential Energy will provide written confirmation of this exemption; this exemption will apply so long as the requirements that have been identified in Table B1 are met.

2.2 Part 2 - Criteria for Approval to Discharge Liquid Trade Waste into Essential Energy's Sewerage System

2.2.1 Factors for Consideration

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

- The potential impacts of the proposed discharge on Essential Energy's ability to meet the objectives outlined in Section 1.3 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 safeguards if the pre-treatment system fails
- The capability of the sewerage system (both transportation and treatment components) to accept the quality and quantity of the proposed liquid trade waste discharge
- The adequacy of chemical storage and handling facilities, and the proposed safeguards for preventing the discharge of chemicals to 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
- The potential for the liquid trade waste discharge to impact on public health
- The possible impacts the discharge may pose to the environment (land, water, air, noise, or nuisance factors)
- The potential impacts of the discharge on the health and safety of the Essential Energy's employees
- The possible impact of the discharge on Essential Energy's sewerage infrastructure or sewage treatment process
- The impact the liquid trade waste will have on the ability of the sewerage scheme to meet Environment Protection Authority licence requirements
- Compliance of the proposed liquid trade waste discharge with limits in this policy
- The potential impacts of the discharge on the quality of, and management practices for, effluent and bio-solids produced from the sewage treatment process
- Whether appropriate safeguards are proposed to avoid the discharge of other, non-approved wastes to the sewerage system
- Waste minimisation and water conservation programs

2.2.2 Discharge Quality

Essential Energy'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 by the Department of Planning and Environment.

Essential Energy may apply more stringent limits than those specified for a particular sewerage treatment works. However, if the guideline limits are to be increased, Essential Energy will seek written administrative advice from DPE.

Where the guideline limits cannot be met, applicants are required to provide justification for exceeding the limits. Based on the type and the proposed contaminant levels, Essential Energy may refuse the application, or may approve it, subject to an effluent improvement program, or other conditions being implemented. Prior to determining such applications, Essential Energy will seek written administrative advice from DPE and will have regard to that advice in determining whether to approve the application.

Additional annual charges may apply to accept trade wastes which exceed the guideline limits.

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

GENERAL ACCEPTANCE GUIDELINE LIMITS	
Parameter	Limits
Flow Rate	The maximum daily and instantaneous rate of discharge (kL/h or L/s) is set on the available capacity of the sewer. Large dischargers are required to provide a balancing tank to even out the load on the sewage treatment works.
BOD ₅	Normally, approved at 300 mg/L. Concentration up to 600mg/L may be accepted.
Suspended Solids	Normally, approved at 300 mg/L. Concentration up to 600mg/L may be accepted.
COD	Normally, not to exceed BOD ₅ by more than three times. This ratio is given as a guide only to prevent the discharge of non-biodegradable waste.
Total Dissolved Solids (TDS)	Up to 4000 mg/L may be accepted. The acceptance limit may be reduced depending on available effluent disposal options and may be subject to a mass load limit.
Temperature	Less than 38°C.
pH	Within the range 7.0 to 9.0.
Oil and Grease	100 mg/L if the volume of the discharge does not exceed 10% of the design capacity of the treatment works, and 50 mg/L if the volume is greater than 10%.
Detergents	All detergents are to be biodegradable. A limit on the concentration of 50 mg/L (as MBAS) may be imposed on large liquid trade wastes.
Colour	Colour must be biodegradable. No visible colour when the waste is 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. Iodine 131 from ablation), acceptance requirements will be set on a case-by-case assessment.

ACCEPTANCE GUIDELINE LIMITS FOR INORGANIC COMPOUNDS	
Parameter	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 SO ₄)	500
Sulphide (as S)	1
ACCEPTANCE GUIDELINE LIMITS FOR ORGANIC COMPOUNDS	
Parameter	Maximum concentration (mg/L)
Benzene	< 0.001
Toluene	0.5
Ethylbenzene	1
Xylene	1
Formaldehyde	30
Phenolic compounds non-halogenated	1
Petroleum hydrocarbons ¹ C ₆ -C ₉ (flammable)	5
Total Recoverable Hydrocarbons (TRH)	30
Pesticides general (except Organophosphorus and Organochlorine)*	0.1
Polynuclear Aromatic Hydrocarbons (PAHs)	5

¹ 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.

ACCEPTANCE GUIDELINE LIMITS FOR METALS		
Parameter	Maximum Concentration (mg/L)	Allowed Daily Mass Limits (g/d)
Aluminium	100	-
Arsenic	0.5	2
Cadmium	1	5
Chromium ²	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
Total heavy metals excluding aluminium, iron and manganese	Less than 30mg/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 pre-treatment is not cost-effective, such waste is acceptable if the discharger installs, maintains and properly operates the required on-site pre-treatment.
3. The analytical testing methods for the above parameters should be in accordance with the Australian Sewage Quality Management Guidelines, June 2012, WSAA and Essential Energy's requirements.

² 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.

2.2.3 Prohibited or Restricted Substances and Waste

Some substances are not suitable for discharge to the sewerage system. Table 2 sets out those substances which must not be discharged to the sewerage system.

Essential Energy may not grant approval for the discharge of these substances into the sewerage system unless it is specifically approved by Essential Energy. Prior to such determination, Essential Energy will seek written administrative advice from DPE and will have regard to that advice in determining whether to approve the application.

In addition, Section 2.2.3.1 lists the discharges either prohibited or restricted. Refer to Annexure B for detailed description of substances and discharges either prohibited or restricted.

Table 2: 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 (including dieldrin, heptachlor and chlordane)
	Organophosphorus pesticides and/or waste arising from the preparation of these substances (including chlopyrifos, diazinon and malathion)
	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*
	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, storm water, seepage or groundwater, unless specifically permitted
	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 contain pollutants at concentrations which inhibit the sewage treatment process – refer <i>National Wastewater Source Management Guideline, July 2008, WSAA</i> ; and
	Any other substances listed in a relevant regulation, licence or policies.

*In excess of the approval limit.

2.2.3.1 Other Substances/ Discharges 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-sinkers, macerators, alkaline hydrolysis).
- Discharge from solid food waste processing units (digesters/composters, etc.)
- Use of additives in pre-treatment systems

For further details on limitations and restrictions applicable to above discharges, refer to Annexure B of this policy, and 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

Essential Energy's written approval is required prior to commencing discharging liquid trade waste to its sewerage system. Application forms are available from Essential Energy.

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 Annexure B.

Prior to making an application, applicants are to contact Essential Energy to conduct a preliminary inspection so that the correct category of discharger can be applied, or requirements implemented prior to making an application.

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 The Five Steps to Approval

The approval process involves five steps:

Step 1 – Pre-application consultation

Contact Essential Energy prior to making an application so that an inspection can be conducted and requirements can be discussed to ensure a successful application, and to determine if an application is required (See Part 1 for discharges exempt from application)

Step 2 – Receiving the application

Complete the required application, with attachments, which will be provided.

Step 3 – Assessing the application

Essential Energy will assess the application against requirements for discharge.

Step 4 – Seeking written administrative advice

Essential Energy may be required to seek written administrative advice from the New South Wales Office of Water.

Step 5 – Finalising the determination

Application will be approved or approved with conditions or denied. Dischargers will be required to enter into a Liquid Trade Waste Services Agreement.

2.3.4 *Process in Determination of Applications*

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

The applicant must provide the following information:

- Applicant's full name, address and contact details
- Site owner's full name, address, and contact details, if different to the applicant.
- Address of the business/industry where discharge to the sewerage system will occur
- Contact person and contact details for the premises
- Proposed date of commencement of discharge to the sewerage system
- Type of process/activity generating the liquid trade waste
- Hours of business operation
- Proposed rate of discharge, including
 - maximum per day and per hour (if applicable)
 - hours of the day during which discharge will take place
- Proposed pre-treatment facilities, including:
 - type and details (e.g., model)
 - size
 - operational procedures
 - details on equipment maintenance
- Site plan, including:
 - liquid waste pre-treatment facilities
 - internal wastewater drainage
 - location of sampling points
 - proposed connection point to the sewerage system
 - stormwater drainage plan

Additional information required for applications in Concurrence Classification B or C

- Flow diagram and hydraulic profile of any proposed pre-treatment facilities
- Physical and chemical characteristics of the proposed discharge, including:
 - nature of source
 - expected maximum and average concentrations of pollutants, and
 - temperature and pH
 - (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.)

- Nature and chemical composition of all substances stored/used on-site (supply Material Safety Data Sheets)
- Details of storage facilities
- Relevant safety data sheets
- Location of flow measurement point and proposed methods
- Proposed arrangements for the disposal of other wastes not discharged to the sewerage system
- Any relevant environmental impact assessments
- Consultant report (if applicable)
- Any additional details as requested by Essential Energy

2.3.5 Approval of Applications

Where an application is approved, Essential Energy will notify the applicant as soon as practical of the approval, 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 approved by Essential Energy. An applicant may also apply to Essential Energy to renew or extend an approval.

2.3.6 Refusal

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

2.3.7 Change of Approval Holder

An approval to discharge liquid trade waste to Essential Energy'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. Essential Energy 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.

2.3.8 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.

2.3.9 Modification and Revocation of Approvals

Essential Energy reserves the right to modify or revoke an approval to discharge liquid trade waste to the sewerage system in any of the following circumstances:

- If the approval was obtained by fraud, misrepresentation or concealment of facts
- For any cause arising after the granting of the approval which, had it arisen before the approval was granted, would have caused the Essential Energy not to have granted the approval
- For failure to comply with a requirement made by or under clause 150 of the Water Management (General) Regulation 2018 relating to a condition of the approval; or

- For failure to comply with a condition of the approval.

2.3.10 Administrative Advice from the Department of Primary and Environment (DPE)

To assist in the assessment of the trade waste applications and to obtain written administrative advice from the Director General of DPE, three classifications of liquid trade waste have been established: classification A, B and C. This classification is based on the level of risk posed by such discharges on the sewerage system, i.e. Low risk, medium risk and high risk liquid trade waste.

The activities listed under these three classifications are the same as those listed under Concurrence Classifications A, B and C in the Trade Waste Regulation Guidelines.

- Classification A – All those activities listed in Annexure D belong to this classification, Essential Energy will not seek written administrative advice from DPE for individual applications in this classification. However, the approval process will be in accordance with the procedure outlined in the Trade Waste Regulation Guidelines. As indicated in PART 1 (Section 2.1) of this document, Essential Energy have been exempted for obtaining written advice for all those activities listed in Table B1 (in Annexure A).
- Classification B – Liquid trade waste dischargers whereby Essential Energy may apply to the Director General of DPE for authorisation to approve these applications without seeking written administrative advice from DPE for individual applications in this classification.
- Classification C – All other liquid trade waste dischargers that do not fall within Classification A and B, Essential Energy will seek written administrative advice from DPE and that it will have regard to that advice in determining whether to approve or refuse the application.

3.0 LIQUID TRADE WASTE FEES AND CHARGES

Essential Energy provides sewerage and liquid trade waste services on a commercial basis to non-residential discharges. Essential Energy's fees and charges are determined by the Independent Pricing and Regulatory Tribunal (IPART) after an extensive public consultation process.

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 cross-subsidies from residential customers, appropriate fees and charges are levied for liquid trade waste.

Refer to Section 3.8 for discussion on current trade waste fees.

Essential Energy's liquid trade waste fees may include:

- General fees and charges (application fee, annual trade waste fee, inspection and/or re-inspection fees and renewal fees)
- Category specific charges (trade waste charges for Charging Category 2 discharges, excess mass charges for Charging Category 3 discharges and non-compliance charges)
- Other charges related to the nature of the waste (e.g., charges for the discharge of stormwater from large areas)

Detailed description of the liquid trade waste fees and charges and the methodology of calculating them are provided in Annexure C.

3.1 Liquid Trade Waste Charging Categories

For trade waste charging purposes liquid trade waste dischargers are divided into four charging categories, Category 1, 1a, 2 and 3:

- Category 1 – discharges requiring nil or only minimal pre-treatment equipment and whose effluent is well defined. In addition, Category 1 includes dischargers, requiring prescribed pre-treatment but low impact on the sewerage system. If pre-treatment equipment is not provided or not maintained, then such dischargers will be required to pay non-compliance usage charge.
- Category 1a – discharges requiring prescribed pre-treatment but have low impact on the sewerage system as their effluent is usually of low strength. If pre-treatment equipment is not provided or not maintained, then such dischargers will be required to pay non-compliance usage charge.
- Category 2 – discharges with prescribed pre-treatment and other activities listed under this charging category in Annexure C. 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 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 Essential Energy's acceptance limits, dischargers will be required to pay non-compliance excess mass charges and pH charges

Note that these charging categories are different to the classifications that have been established for concurrence purposes (i.e. Classification A, B, C). The relationship between Concurrence Classifications and Charging Categories are shown in Figure 1 in Annexure C.

3.2 Non-Compliance Liquid Trade Waste Charges

In order to encourage compliance, Essential Energy may apply non-compliance trade waste charges. Refer to Annexure C for further details of non-compliance charges for different charging categories.

Essential Energy will continue applying non-compliance charges until the discharge meets Essential Energy's approved quality (or the liquid trade waste policy) limits, within the timeframe determined by Essential Energy 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 Essential Energy's sewerage system. Essential Energy may also consider issuing penalty infringement notice to a non-compliant discharger or may prosecute the discharger.

3.3 Other Applicable Liquid Waste Charges

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

- Food waste disposal units, ie., garbage grinders/insinkerators (for existing installations only, new installations are not permitted)
- Solid food waste processing unit
- Discharge of stormwater to the sewerage system from large open areas or large quantities of groundwater.

Refer to Annexure C 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 Annexure C and Trade Waste Management Guidelines 2021 for further details.

3.5 Summary of Category Specific Fees and Charges

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

Table 3: Summary of fees and charges

Fee/Charge ³	Category 1	Category 1a	Category 2	Category 3
Application fee	Yes ⁴	Yes ⁴	Yes	Yes
Quarterly Non – Residential Sewerage Bill with appropriate Sewer Usage Charges	Yes	Yes	Yes	Yes
Annual liquid trade waste fee	Yes	Yes	Yes	Yes
Re-inspection fee (when required)	Yes	Yes	Yes	Yes
Trade waste usage charge/kL	No	No	Yes	No
Human waste disposal charge/kL	No	No	No	No
Excess mass charges/kg	No	No	No	Yes
Non-compliance trade waste usage charge/kL	Yes ⁵	Yes ⁵	Yes ⁵	No
Non-compliance excess mass/kg and pH charges/kL (if required)	No	No	No	Yes

Note: Refer to Annexure C for other applicable charges not included in this Table.

³ In addition, a Food Waste Disposal Charge/bed will apply where Essential Energy has approved the use of an existing food waste disposal unit for a hospital, nursing home or other eligible facility, additional food waste disposal charge will be payable annually.

⁴ Not applicable for discharges listed as 'Deemed to be Approved'

⁵ Non-compliance trade waste usage charge, if the discharger fails to install or properly maintain appropriate pre-treatment equipment. Refer to Appendix D.

3.6 Responsibility for Payment of Fees and Charges

Property (land) owners are responsible for the payment of fees and charges for water supply, sewerage and liquid trade services provided by Essential Energy. 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 owner of the property will be billed for water supply, sewerage and liquid trade waste services provided and it is the owner's responsibility to pay such fees and charges within the period specified. The owner may arrange to recover such fees and charges through the lease arrangement between the owner and the occupier.

3.7 Bond

Where a discharge is considered to be high risk:

- i.e. the discharger may not comply with the discharge approval; a "Bond" may be imposed on the discharger, or
- Where a discharger has on previous occasions failed to comply with a discharge approval a "Bond" may be imposed on any new agreement.

The bond is to consist of 100% of the estimated annual liquid trade waste fees and charges for the trade waste discharger.

Note: If the **nature of a discharge** is high risk, then it is advisable to impose a bond.

Note: All dischargers of liquid trade waste to Essential Energy's sewerage system should be aware that they are subject to prosecution and imposition of fines under the Water Management Act 2000 and Regulations, the Protection of the Environment Operations Act 1997 and Regulations. In addition to fines, Essential Energy may recover costs of damages and fines incurred by Essential Energy as a result of an illegal liquid trade waste discharge.

3.8 Current Trade Waste Fees

Monetary values quoted in this policy are for example purposes **only**.

Current liquid trade waste fees and charges are listed on Essential Energy's website:
(<https://essentialwater.com.au/bills-and-payments/water-and-sewerage-prices/>).

4.0 THE NSW FRAMEWORK FOR REGULATION OF SEWERAGE AND TRADE WASTE AND ALIGNMENT OF WITH THE NATIONAL FRAMEWORK

The NSW framework for regulation of sewerage and trade waste and the alignment with the national framework for wastewater source management are listed in Annexure E.

5.0 LIQUID TRADE WASTE SERVICES AGREEMENT

In addition to its approval, Essential Energy may require certain dischargers, including those who wish to discharge liquid trade waste in large volumes (discharge >20 kL/d) or industrial waste (Classification C type 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 Essential Energy.

The conditions will be binding on the applicant and Essential Energy. The agreement will be for a period of up to five years. No discharge is to be made to Essential Energy's sewerage system until an agreement or an interim agreement has been executed.

Provision can be made in the agreement for (in addition to Essential Energy's approval conditions):

- Additional conditions for discharge of liquid trade waste
- Cancellation of the agreement and/or order to cease the discharge if the discharger is found to be in breach of the agreement or the liquid trade waste approval or, in the opinion of Essential Energy, the waste is adversely affecting the sewerage system or the environment
- Entry by Essential Energy officers to inspect the liquid trade waste collection, treatment, monitoring and disposal systems
- The applicant to notify Essential Energy 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 Essential Energy prior to discharging to the sewerage system.

6.0 ENFORCEMENT OF APPROVALS AND AGREEMENTS

Any person who fails to obtain Essential Energy's approval to discharge liquid trade waste into the sewerage system, or fails to comply with the conditions of the approval, may be liable to a penalty as provided under clause 148 of the *Water Management (General) Regulation 2018 (Discharge requires discharge approval)*.

Polluting of any waters by a discharger of liquid trade waste who does not have an Essential Energy approval (or any discharge in contravention of that approval) is an offence under section 120 (1) of the *Protection of the Environment Operations Act 1997*. In addition, under section 224 of this Act, Essential Energy may issue a penalty notice (i.e. an on-the-spot fine) to such a discharger (refer also to Schedules 6 of the *Protection of the Environment Operations (General) Regulation 2022*)

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 Essential Energy against any resulting claims, losses or expenses. Suspensions may also apply and may include a notice to cease the discharge.

A maximum of two orders may be sent to comply with agreement conditions. Upon failure to comply with conditions after two orders to comply have been issued, a disconnection notice may be issued. Notification will also be sent to the NSW Department of Health, notifying the department of intent to disconnect the sewer service for failure to comply with discharge approvals.

Note: To disconnect the trade waste service, disconnection of the sewerage service may not be required.

7.0 PREVENTION OF WASTE OF WATER

Water must be used efficiently and must be recycled where practicable. It is an offence under clause 126 of the *Water Management (General) Regulation 2018* to waste or misuse water. Dilution of trade waste with water from any non-process source including Essential Energy's water supply, bore water, groundwater and/or storm water as a means of reducing pollutant concentration is therefore strictly prohibited.

8.0 EFFLUENT IMPROVEMENT PLANS

Where the existing liquid trade waste discharged does not meet Essential Energy's requirements, the applicant may be required to submit an 'Effluent Improvement Plan' setting out how Essential Energy's requirements will be met.

The proposed plan must detail the methods and actions proposed to achieve the discharge limits and a timetable for implementation of the proposed actions. Such actions may include more intensive monitoring, improvements to work practices and/or pre-treatment facilities to improve the effluent quality and reliability.

9.0 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 Essential Energy within the time specified in the liquid trade waste approval.

10.0 AUTHORITIES AND RESPONSIBILITIES

Position / Title	Responsibility
Nil Entry	

11.0 DEFINITIONS

Administrative Advice from the Department of Primary and Environment (DPE) - Essential Energy will seek written administrative advice from DPE and it will have regard to that advice in determining:

- Whether to approve medium and high risk liquid trade waste applications (ie Classification B and C applications)
- Whether to approve the discharge of a prohibited matter
- To increase the acceptance limits beyond those specified in Table 1 of this policy for a particular application.

Biochemical Oxygen Demand (BOD₅): The amount of oxygen utilised by micro-organisms in the process of decomposition of organic material in wastewater over a period of five days at 20°C. In practical terms, BOD is a measure of biodegradable organic content of the waste.

Bio-solids: 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): A measure of oxygen required to oxidize 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 premise that is typically a stand-alone operation and prepares food for consumption off-site. These types of businesses typically cater to wedding functions, conferences, parties, etc. This definition would not apply to a food processing factory supplying pre-prepared meals to an airline company or similar.

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 storm water drainage system, and leaks and spillages from stored products and chemicals.

Director General: Director General means the Director General of the Department of Primary and Environment (DPE).

Due Diligence Program: A plan that identifies potential health and safety, environmental or other hazards (e.g. spills, accidents or leaks) and appropriate corrective actions aimed at minimising or preventing the hazards.

Effluent: The liquid discharged following a wastewater treatment process.

Effluent Improvement Plan (EIP): The document required to be submitted by a discharger who is not meeting the acceptance limits for discharge waste quality set down in Essential Energy'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.

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.

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.

Liquid Trade Waste: All liquid wastes other than sewage of a domestic nature, discharged to sewer.

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, basket waste arrestors, plaster arrestors and fixed or removable screens.

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

National Framework for Wastewater Source Management: refer to Annexure E.

NSW Framework for Regulation of Sewerage and Trade Waste: refer to Annexure E.

Department of Primary and Environment (DPE): In accordance with the Public Sector Employment and Management (Departments) Order 2011, from 4 April 2011 the NSW Office of Water is a separate office within the Department of Planning, Industry and Environment (DPIE).

DPE Concurrence: is required before Essential Energy may approve an application for the discharge of liquid trade waste (including septic tank and pan waste) to the sewerage system. It is a requirement that Essential Energy obtain the written approval of the Director General of DPE prior to approving such waste to be discharged to the Essential Energy sewerage system.

Open Area: Any unroofed process, storage, washing or transport area potentially contaminated with rainwater and substances which may adversely affect the sewerage system or the environment.

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

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.

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
- (b) Land, whether built on or not
- (c) Shed or other structure
- (d) Tent
- (e) Swimming pool
- (f) Ship or vessel of any description (including a houseboat); or
- (g) 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 8 of *Liquid Trade Waste Regulation Guidelines, 2021*).

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.

Regulations and Acts: Regulations under the *Water Management Act 2000*, including the *Water Management (General) Regulation 2018*. This also includes the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (General) Regulation 2009*

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.

Sewerage 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 Domestic Nature: Includes 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 by-products (effluent and bio-solids) management facilities.

Sewage Treatment Works: This is the facility designed to treat sewage. The level of treatment will vary based on the expected quality of the effluent.

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. Also referred to as non-filtrable residue (NFR).

Total Dissolved Solids (TDS): The dissolved solids in wastewater.

Trade Waste Discharge Factor (TWDF): The multiplication factor used to determine the proportion of liquid trade waste as a percentage of the water consumption at a property. This is the amount of liquid trade waste discharged to the sewerage system.

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.

12.0 REFERENCES

Internal
CEOM7046.02 - Water: Liquid Trade Waste Due Diligence Program
CEOM7046.03 - Guideline (Internal) Liquid Trade Waste Approval and Enforcement
CEOM7046.06 - Water: Liquid Trade Waste Application Attachment (Commercial Food)
CEOM7046.07 - Water: Liquid Trade Waste Application Attachment (Mechanical Repairers)
CEOM7046.08 - Water: Liquid Trade Waste Application Attachment (Laboratory)
CEOM7046.09 - Water: Liquid Trade Waste Application Attachment (Animal Wash)
CEOM7046.12 - Branch Manual: Operational Deed - Liquid Trade Waste: General Conditions of Approval
CEOM7046.13 - Water: Liquid Trade Waste Services Agreement
CEOP8332 - Water Document: Sewer Discharge Factors

External
Water Management Act 2000 and Regulations
Protection of the Environment Operations Act 1997
Protection of the Environment Operations (General) Regulation 2009

13.0 RECORDKEEPING

Type of Record	Storage Location	Retention Period
Nil Entry		Records Management Toolkit

* The following retention periods are subject to change eg if the records are required for legal matters or legislative changes. Before disposal, retention periods should be checked and authorised by the 'Records Management Team'.

14.0 REVISIONS

Issue No.	Section	Details of changes in this revision	Change Risk Impact?
3	All	Recommendations from NSW Office of Water (N.O.W) adopted following referral of policy to N.O.W for comment.	-
		Department of Water and Energy (DWE) changed to New South Wales Office of Water (NOW).	-
		\$2002/2003 values change to 2011/2012	-
	10	Significant changes to charging descriptions	-
	9	Change from NSW Water Supply, Sewerage and Trade Waste Pricing Guideline 2002 to NSW Independent Pricing and Regulatory Tribunal Determination and Final Report 2010	-
4	All	Document reached its next review date and no changes were made, updated issue number and published date only.	-
5	All	Policy restructured to align with the Department of Planning, Industry and Environment's (DPIE) updates to the Liquid Trade Waste Management Guidelines 2021 and the 2021 DPIE Model Policy.	-
		The amendments include changes to wastewater quality limits, wastes exempted, wastes prohibited from discharge, and references to trade waste fees.	-
		Restructuring of the document required several sections of the previous revision to be appended to e.g., Appendices A to E.	-
		Department of Planning, Industry and Environment (DPIE) changed to Department of Primary and Environment (DPE).	-
		New South Wales Office of Water (NOW) changed to Department of Planning and Environment (DPE).	-
6	All	Update to current brand style guide and template	Low
	6	Update text	Low

Annexure A - Deemed to be Approved Activities

The list of discharges exempts from obtaining of Essential Energy's approval (ie considered as Deemed to be approved) is shown in Table A1. Each such discharger must meet standard requirements specified in this Table.

An annual trade waste fee applies to each such discharger and Essential Energy will provide written advice of any such exemption after an initial inspection of the premises.

Table A1 - Discharge deemed to be approved

Activity	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 < 500 L/h	No chromium-based products to be discharged to the sewer.
Crafts ceramic, pottery, etc. (including hobby clubs)—flows < 200 L/d	Nil.
Crafts ceramic, pottery, etc. (including hobby clubs)—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 outlet and sink strainer/hair trap 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.
Fruit and vegetable – retail	Dry basket arrestor for floor waste outlet and sink strainer required (see Note 3).

Activity	Requirements
Hairdressing	Dry basket arrestor for floor waste outlet and sink strainer/hair trap.
Jewellery shop <i>Miniplater</i> <i>Ultrasonic washing</i> <i>Precious stone cutting</i>	Mini-plater vessel to contain no more than 1.5 L of precious metal solution. Nil. If : < 1000 L/d plaster arrestor required > 1000 L/d general-purpose pit required
Medical centre/doctor's surgery/physiotherapy (plaster casts only)	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 Cleaning Units <i>Carpet Cleaning</i> <i>Garbage bin washing</i>	20 micron filtration system fitted to a mobile unit Dry basket arrestor for floor waste outlet is required.. Discharge is via a 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.
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 Essential Energy.
- 2** If activity is conducted outdoors, the work area is to be roofed and bunded to prevent storm water ingress into the sewerage system.
- 3** Dry basket arrestors must be provided for all floor waste outlets.
- 4** Food preparation activities need to comply with sound housekeeping practices including:
 - (a) Dry sweeping floors before washing.
 - (b) Scraping all utensils, plates, bowls etc. into a waste bin before washing up.
- 5** Use of a food waste disposal unit (garbage grinders) and/or a food waste processing unit (food digesters, composters, etc.) is not permitted.

Annexure B - Prohibited or Restricted Substances and Wastes from Discharge to Sewer**B1 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. 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 Trade Waste Management Guidelines 2021 for further information.

B2 Contaminated Groundwater

Similar to stormwater, discharge of groundwater or seepage water to a sewerage system is prohibited. 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 Essential Energy'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.

B3 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 Essential Energy'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 Essential Energy's sewerage system
- appropriate pre-treatment to meet Essential Energy's acceptance limits.

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

B4 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 receiving facilities acknowledging and agreeing to receive such wastewater.

B5 Discharge from Service station forecourts and other refuelling points

B5.1 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.

B5.2 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 Annexure E 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.

B6 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 that pulverise solid waste. Solid waste includes, but not limited to, sanitary napkin, placenta, surgical waste, disposable nappy, mace 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.

B6.1 Discharge from Solid Food Waste Processing Units (digesters/ composters, etc.)

Discharge from a solid food waste processing unit (digesters/composters, etc) to Essential Energy's sewerage system is a Concurrence Classification C discharge (ie. Charging Category 2), hence

Essential Energy 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 by an Essential Energy representative or an independent party acceptable to Essential Energy.

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

Solid food waste digesters are not allowed in new installations i.e., garbage grinders, insinkers and waste disposal units.

B7 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 Essential Energy with the department's concurrence.

B8 Discharge of disposable products marketed as flushable

Any disposable solid products including those marketed as "flushable" (eg. wet wipes, cleaning wipes, cat litter, etc.) is not permitted to flush 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 Essential Energy's sewerage system and may cause raw sewage overflow to the environment.

Annexure C - Non-Residential Sewerage and Liquid Trade Waste Fees and Charges

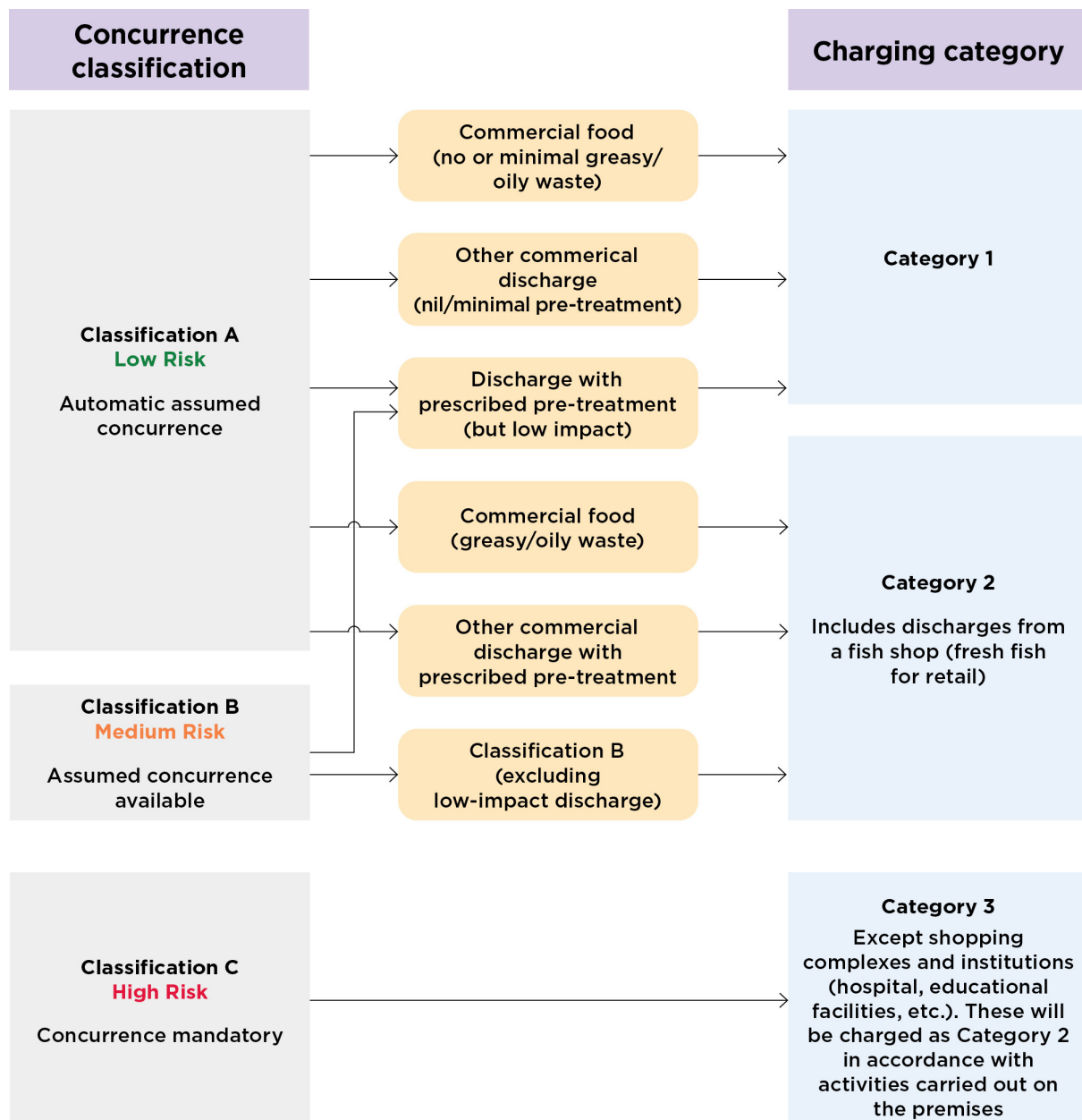
This Annexure provides information on Essential Energy's charging criteria for liquid trade waste customers. Refer to Section 3.8 for discussion on current trade waste fees.

The best practice pricing for liquid trade waste services are to ensure that liquid trade waste dischargers pay a fair share of the cost of sewerage services provided by Essential Energy. Appropriate pricing is essential to provide relevant pricing signals to non residential and liquid trade waste customers to use water and sewerage system efficiently.

C1 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, 1A 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 1A. Classification C discharges fall into Charging Category 3.

C1.1 Description of Various Trade Waste Fees and Charges

C1.1.1 Application Fee

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

Application fees will be set annually by Essential Energy and will also include renewal of an existing liquid trade waste approval and "Change of Ownership" of a trade waste approval.

C1.1.2 Annual Trade Waste Fee

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

As part of an inspection, Essential Energy 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.

Annual liquid trade waste fee varies for different charging categories in order to reflect the complexity of their inspection and administration requirements. Annual trade waste fees will be set by Essential Energy.

In particular, for Category 3 discharges, Essential Energy 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 D7.4 with regard to annual fees applicable to premises with multiple activities.

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

Annual Trade Waste Fee's will be charged at a daily rate upon commencement of a trade waste services agreement and charged every quarter.

C1.1.3 Inspection / Re-Inspection Fee

Cost of one inspection is usually included in 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.

Essential Energy may recover the cost of sample analysis from the discharger, in addition to the re-inspection fee.

C.1.1.4Renewal Fee

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

C1.1.5 Category Specific Charges

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

C2 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/hostel < 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.

C2.1 Category 1 Discharger – Liquid Waste Charges

The liquid trade waste bill for a Category 1 discharger (TW_1) is:

$$TW_1 = A_1$$

$$A_1 = \text{Annual liquid trade waste fee (\$) for Category 1}$$

Additional fees may apply, including but not limited to:

- The Liquid Trade Waste Application Fee. See Section D1.1.1 in Annexure D for details.
- The Liquid Trade Waste Re-Inspection Fees. See Section D1.1.3 in Annexure D for details.
- The Liquid Trade Waste Renewal Fees. See Section D1.1.4 in Annexure D for details.
- Non-Compliance Liquid Trade Waste Charges. See Section D5 in Annexure D for details.
- Other Liquid Trade Waste fees, as applicable under Section 3 of this policy.

C3 Category 1a Discharger

This charging category includes:

- Classifications A or B discharges identified as low risk.

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

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 school⁶, vehicle washing/detailing (excluding truck washing).

C3.1 Category 1a Discharger – Liquid Waste Charges

The liquid trade waste bill for a Category 1a discharger (TW_{1A}) is:

$$TW_{1A} = A_{1A}$$

A_{1A} = Annual liquid trade waste fee (\$) for Category 1a

Additional fees may apply, including but not limited to:

- The Liquid Trade Waste Application Fee. See Section D1.1.1 in Annexure D for details.
- The Liquid Trade Waste Re-Inspection Fees. See Section D1.1.3 in Annexure D for details.
- The Liquid Trade Waste Renewal Fees. See Section D1.1.4 in Annexure D for details.
- Non-Compliance Liquid Trade Waste Charges. See Section D5 in Annexure D for details.
- Other Liquid Trade Waste fees, as applicable under Section 3 of this policy.

C3 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/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 hall⁷, 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).

⁶ If significant hot food preparation is carried out, Category 2 charges may be levied.

⁷ If the type and size of kitchen fixtures installed enable catering for large functions.

C3.1 Category 2 Discharger – Liquid Trade Waste Charges

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

The liquid trade waste bill for a Category 2 discharger (TW_1) is:

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

A_2	=	Annual liquid trade waste fee (\$) for Category 2
Q_{TW}	=	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.

Additional fees may apply, including but not limited to:

- The Liquid Trade Waste Application Fee. See Section D1.1.1 in Annexure D for details.
- The Liquid Trade Waste Re-Inspection Fees. See Section D1.1.3 in Annexure D for details.
- The Liquid Trade Waste Renewal Fees. See Section D1.1.4 in Annexure D for details.
- Non-Compliance Liquid Trade Waste Charges. See Section D5 in Annexure D for details.
- Other Liquid Trade Waste fees, as applicable under Section 3 of this policy.

C4 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 manufacture and repackaging, contaminated site treatment, cooling towers, 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, foundry, food processing* (cereals/cannery/condiments/confectionary/edible oils/fats/essence/flavours/fish/fruit juice/gelatine/honey/meat/pickles/smallgoods/tea and coffee/vinegar/yeast manufacture, etc.), 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 receipt depot and other pump-out waste depot), metal finishing, metal processing (refining/rolling/non cyanide heat treatment/phosphating/photo 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.

C4.1 Category 3 Discharge – Liquid Trade Waste Charges

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

Additional fees may apply, including but not limited to:

$$TW_3 = A_3 + EMC$$

A_3 = Annual liquid trade waste fee (\$) for Category 3**

EMC = Excess mass charges (\$), if applicable. See Section D4.1.1 below.

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

Additional fees may apply, including but not limited to:

- The Liquid Trade Waste Application Fee. See Section D1.1.1 in Annexure D for details.
- The Liquid Trade Waste Inspection or Re-Inspection Fees. See Section D1.1.3 in Annexure D for details.
- The Liquid Trade Waste Renewal Fees. See Section D1.1.4 in Annexure D for details.
- Non-Compliance Liquid Trade Waste Charges. See Section D5 in Annexure D for details.
- Other Liquid Trade Waste fees, as applicable under Section 3 of this policy.

C4.1.1 Excess Mass Charges

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 C1 Deemed concentration of substances in domestic sewage

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
Sulphate (SO ₄)	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 BOD₅ up to 600 mg/L (but excluding COD and pH).

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

Where:

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

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

Q_{TW} = 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 Section 3.8 for charging rates for various substances)

C4.1.2 Excess Mass Charges for BOD

BOD up to 600 mg/L

Equation (1) applies for BOD₅ 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 Essential Energy approves the acceptance limits for BOD₅ 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_e is the excess mass charging rate U_e (\$/kg) for BOD is calculated as:

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

Where: C = Charging rate (\$/kg) for BOD₅ 600mg/L

Actual BOD = Concentration of BOD₅ as measured in a sample

C4.2 Tankered Category 3 Waste

Essential Energy's facilities do not accept tankered Category 3 waste.

C5 Non-Compliance Liquid Trade Waste Charges

Non-compliance charges for Category 1 and 2 dischargers

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:

C5.1 Category 1 discharger - non-compliance charges

A trade waste usage charge (\$/kL) will be applied. Please refer to Section 3.8 of this policy.

C5.2 Category 1a discharger - non-compliance charges

A trade waste usage charge (\$/kL) will be applied. Please refer to Section 3.8 of this policy.

C5.3 Category 2 discharger – non-compliance charges

For Category 2 dischargers, a non-compliance charge as per Essential Water's Schedule of Water and Sewerage Charges will be applied. Please refer to Section 3.8 of this policy.

Dischargers who have an undersized grease arrestor and improved the effluent quality by other means (e.g. increased pump-outs, installing additional pre-treatment equipment, etc.) will pay a trade waste usage charges in accordance with a Category 2 discharger.

Dischargers who cannot install a grease arrestor or those who have an arrestor with capacity significantly less than the required size and are unable to improve the effluent quality by means described above will have to pay non-compliance trade waste usage charges. Please refer to Section 3.8 of this policy.

C5.4 Non-compliance charges for Category 3 discharger

If a discharger in charging Category 3 fails to comply with the acceptance limits specified in Essential Energy's approval conditions, non-compliance charges as per Essential Water's Schedule of Water and Sewerage Charges will be applied. Please refer to Section 3.8 of this policy.

C5.4.1 Non-compliance pH charge

If the pH of the waste discharge by Category 3 discharger 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 =

$$K \times |\text{actual pH} - \text{approved pH}|^{\#} \times 2^{|\text{actual pH} - \text{approved pH}|^{\#}} \quad (3)$$

#Absolute value to be used.

K = pH coefficient in \$/kL, as confirmed by Essential Water.

Example 4:

Essential Energy has approved the pH range 7.0 to 9.0 for a large discharger. The pH coefficient (K) listed as per Essential Energy's trade waste fees list is \$0.45

Case 1: pH measured 6.0

$$\text{Charging rate for pH (\$/kL)} = 0.45 \times |6 - 7|^{\#} \times 2^{|6 - 7|^{\#}} = \$0.90/\text{kL}$$

Case 2: pH measured 11.0

$$\text{Charging rate for pH (\$/kL)} = 0.45 \times |11 - 9|^{\#} \times 2^{|11 - 9|^{\#}} = \$3.60/\text{kL}$$

Absolute value to be used.

C5.4.2 Non-Compliance Excess Mass Charges

Equation (4) shall apply for non-compliance excess mass charges for various substances, except for BOD₅ where equation (5) shall apply to calculate the charging rate.

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

Where:

S	=	Concentration (mg/L) of a substance in sample
A	=	Approved maximum concentration (mg/L) of pollutant as specified in Essential Energy's approval.
Q	=	Volume (kL) of liquid trade waste discharged for the period of non-compliance
U	=	Excess mass charging rate (\$/kg) for the substance
D	=	Concentration (mg/L) of the substance deemed to be present in domestic sewage

C5.4.3 Non-compliance excess mass charges for BOD

The non-compliance excess mass charging rate (U_n) for BOD₅ is calculated by using equation (5):

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

Where:

U_n	=	BOD ₅ non-compliance excess mass charging rate in (\$/kL).
A	=	BOD ₅ approval limit
C	=	Charging rate (\$/kg) for BOD ₅ 600mg/L.

C6 Other applicable liquid trade waste charges

C6.1 Garbage grinders - Food waste disposal charge⁸

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 Essential Water 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_F), as shown below:

$$\text{Food waste disposal charge (\$)} = B \times U_F$$

Where:

B	=	Number of beds in hospital or nursing home.
U_F	=	Annual charging rate (\$/bed) for a food waste disposal unit at a hospital or nursing home.

C6.2 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.

⁸ For existing installations of garbage grinders only. New installations are not permitted.

Excess mass charges for all parameters in excess of the deemed concentrations in domestic sewage and non-compliance charges, above the Essential Energy's acceptance limits, will be applicable to the waste stream from such equipment (refer Section C4.1 for further information).

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

C6.3 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 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. Excess mass charges may be also applied to such discharges.

C6.4 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 shops, all located on the same site.

C6.4.1 Shopping centre

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

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

C6.4.2 Commercial strata title units

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

C6.4.3 Hospitals, tertiary educational facilities and correctional centres

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

The annual fee will be in accordance with the relevant charging category, which is Category 2 for hospitals and educational facilities. A correctional centre may fall into Category 3, if industrial activities are carried on-site.

Essential Energy will apply 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. Essential Energy 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.

C6.4.4 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, Essential Energy will assess the application and determine the relevant charging categories and applicable fees and charges.

Annexure D - List of discharges Essential Energy May Approve**D1 Classification A**

Discharges from activities that Essential Energy can process without seeking Department concurrence, subject to complying with certain requirements.

Commercial Retail Food Preparation Activities	Other Commercial Activity
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 shops	Laundry or laundromat (coin operated)
Fast food outlets (McDonalds, KFC, Burger King, Hungry Jack, Pizza Hut, Red Rooster, etc.)	Lawnmower repairs
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	Per shop (retail)
Mobile food van	Photographic tray work/manual development
Motel	Plants retail (no nursery or open space)

Commercial Retail Food Preparation Activities	Other Commercial Activity
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	

Annexure E - Framework for Regulation of Liquid Trade Waste

E1 Framework for regulation of sewerage and trade waste

The NSW framework is driven by the NSW Government's Best Practice Management of Water

Supply and Sewerage Guidelines, 2007. Sound regulation of sewerage and trade wastes requires implementation of all the following integrated measures:

- Preparation and implementation of a sound trade waste regulation policy, assessment of each trade waste application and determination of appropriate conditions of approval. The conditions must be consistent with Essential Energy's Integrated Water Cycle Management Strategy and demand management plan. In addition, execution of a liquid trade waste services agreement is required for large dischargers to assure compliance.
- Preparation and implementation of a sound Development Servicing Plan, in accordance with the NSW Developer Charges Guidelines for Water Supply, Sewerage and Stormwater, 2002. With commercial sewerage develop charges to ensure new development pays a fair share of the cost of the required infrastructure.
- Full cost recovery with appropriate sewer usage charges, in accordance with the NSW Independent Pricing and Regulatory Tribunal Determination and Final Report 2010 and trade waste fees and charges in order to provide the necessary pricing signals to dischargers. These charges must include non-compliance trade waste usage charges and non-compliance excess mass charges in order to provide the necessary incentives for dischargers to consistently comply with their conditions of approval.
- Monitoring, mentoring and coaching of dischargers in order to achieve cleaner production and assist them to comply with their conditions of approval.
- Enforcement, including appropriate use of penalty notices imposed under the Water Management (General) Regulation 2018.
- Disconnection of a trade waste service in the event of persistent failure to comply with Essential Energy's conditions of approval.
- Together, the above six measures comprise the framework for regulation of sewerage and trade waste. The framework involves a preventive risk management approach, which has been developed to address the use of common pool resources by providing economic incentives for dischargers to minimise their waste and to consistently comply with their conditions of approval.

E2 Alignment with the national framework for wastewater source management

The NSW framework is driven by the NSW Government's Best-Practice Management of Water Supply of Sewerage Guidelines, 2007 and is consistent with that in the National Framework for Wastewater Source Management. In particular, under the Best-Practice Management Guidelines, Essential Energy is required to achieve the following outcomes:

- Prepare and implement a 30-year Integrated Water Cycle Management Strategy, demand management plan, pay-for-use water supply pricing and community and customer involvement
- Annual performance monitoring, including an annual triple bottom line (TBL) Performance Report and Action Plan to identify and address any areas of under-performance
- Achieve full cost recovery for water supply, sewerage and trade waste services and apply an appropriate non-residential sewer usage charge
- Prepare and implement a sound trade waste regulation policy and issue an appropriate approval to each trade waste discharger, including waste minimisation and cleaner production

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- Appropriate trade waste fees and charges (including incentives to comply with Essential Energy's approval conditions through non-compliance trade waste usage charges and non-compliance excess mass charges)
 - Trade waste services agreement for large dischargers to assure compliance
 - Appropriate training of Essential Energy staff and monitoring, mentoring and coaching trade waste dischargers
 - Enforcement, including appropriate use of penalty notices or orders
 - Disconnection of a trade waste service in the event of persistent failure to comply with Essential Energy's conditions of approval.