

Policy

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| Next scheduled review date: | As required by legislation | | |
| Related legislation: | <p><i>Local Government Act 1993</i></p> <p><i>Local Government (General) Regulation 2005</i></p> <p><i>Work Health and Safety Act 2011</i></p> <p><i>Work Health and Safety Regulation 2017</i></p> <p><i>Protection of the Environment Operations Act 1997</i></p> | | |
| Associated policies/documents: | <p>MidCoast Council Work Health and Safety Policy</p> <p>MidCoast Council Risk Management Policy and Framework</p> <p>MidCoast Council Fees and Charges</p> <p>Best Practice Management of Water Supply and Sewerage Guidelines 2007</p> <p>National Wastewater Source Management Guidelines 2008</p> <p>Liquid Trade Waste Regulation Guidelines 2009</p> | | |
| Responsible division: | Water Services (Water Management and Treatment) | | |

Policy objective

This policy sets out how MidCoast Council will regulate sewerage and trade waste discharges to its sewerage system in accordance with the *NSW Framework for Regulation of Sewerage and Trade Waste*.

The policy is concerned with the approval, monitoring and enforcement process for liquid trade wastes discharged to Council's sewerage system and the levying of commercial sewerage and liquid trade waste fees and charges. It has been developed to ensure the proper control of liquid trade waste and hence protection of public health, worker safety, the environment, and Council's sewerage system.

Coverage of the policy

All Council owned and managed facilities.

Strategic Plan link

MidCoast 2030: Shared Vision, Shared Responsibilities

Value: A connected community

Strategy 6.2 Continue to develop a sustainable network of water, sewer and storm water systems to meet community needs and health and safety standards

Responsible officer (position)

Manager Water Management and Treatment

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Introduction

Authority

This document is a Local Approvals Policy, under section 158 of the *Local Government Act 1993*.

Policy statement

MidCoast Council (MCC) will ensure that all liquid trade waste discharged to its sewerage system is appropriately regulated and adequately monitored.

We are committed to the following principles in managing liquid trade waste:

- Protecting public health
- Protecting the health and safety of MCC employees
- Protecting the environment, particularly the water cycle
- Complying with all relevant legislative requirements
- Encouraging waste minimization and cleaner production in the commercial and industrial sectors
- Promoting water conservation and water recycling
- Ensuring that reuse of treated effluent and biosolids is feasible
- Protecting community assets from damage
- Ensuring responsible cost recovery through appropriate fees and charges
- Providing education to encourage compliance
- Ensuring compliance of liquid trade waste dischargers with MCC's approved conditions

What is liquid trade waste?

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

(See the Glossary on page 31 for definitions of terms relating to liquid trade waste).

Examples of businesses which discharge liquid trade waste include:

- Retail or service businesses, such as restaurants, coffee shops, butchers, florists, hairdressers, photo processing, printing, medical centres, hotels, motels and service stations
- Community/public premises, such as schools, colleges, hospitals and nursing homes
- Industrial premises
- Trade activities, such as mobile carpet cleaning
- Any commercial activities carried out at residential premises
- Liquid discharges from sale yards, stables and kennels
- Septic tank waste, waste from marine pump-out facilities and established sites for the discharge of pan content from mobile homes/caravans to the sewerage system

Liquid trade waste does **not** include:

- Domestic sewage - including toilet, hand wash basin*, shower and bath wastes from all the premises and activities mentioned above and wastewater from residential toilets, kitchens, bathrooms or laundries
- Common use (non-residential) kitchen and laundry facilities in a caravan park
- Residential swimming pool backwash

* used for personal hygiene only

Why does it need to be regulated?

Sewerage systems are generally designed to cater for waste from domestic sources. This type of waste is of predictable strength and quality and can be adequately treated through the usual biological processes.

MCC may accept liquid trade waste into its sewerage system, as a service to business 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, the community's sewerage system and the environment.

Impacts of poor liquid trade waste management include:

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

- Unknown chemicals may interfere with the biological processes used for sewage treatment
- Strong waste, unknown chemicals and high temperature liquids discharged to the system can injure workers involved in sewer maintenance
- Treatment of trade waste places additional loading on sewerage treatment facilities

How is it regulated?

Under section 68 of the *Local Government Act 1993*, anyone wishing to discharge liquid trade waste to the sewerage system must obtain prior approval from the authority that looks after the system.

In the MidCoast local government area, MidCoast Council is the relevant authority. Discharging liquid trade waste without an approval is an offence under section 626 of the *Local Government Act 1993*.

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

To approve liquid trade waste discharges, MCC must obtain concurrence from the Director-General of the Department of Primary Industries (DPI). For industrial or high volume and strength wastes, this means that DPI will be involved in the assessment process on a case-by-case basis.

For most types of business, assumed concurrence can be granted to MCC to issue the approval. This authority is subject to MCC demonstrating that it has an adequate trade waste policy in place, employs people who are qualified to make decisions on trade waste and carries out inspections and monitoring of businesses discharging these wastes.

What does this mean for business?

This means that everyone who sets up a new business, has no current approval to discharge trade waste from the existing business, expands an existing business, or changes its use, will need to consider trade waste requirements.

If the activity involves liquid trade waste, the owner or operator of the business must apply to MCC for approval to discharge this waste to the sewer.

PART 1 - Exemptions

There are **no** exemptions to this policy. Any business which produces liquid trade waste must apply to MCC for approval.

PART 2 – Approval criteria

Considerations

MCC's decision to accept liquid trade waste into its sewerage system is on the basis of a preventive risk management framework for managing risks to the sewer system within an integrated water cycle management context. It will depend on whether the discharge meets our requirements.

When determining an application to discharge liquid trade waste, we will consider the following factors:

- The potential for the liquid trade waste discharge to impact on public health
- The possible impacts the discharge may pose to the environment (land, water, air, noise, or nuisance factors)
- The potential impacts of the discharge on the health and safety of MCC's employees
- The possible impact of the discharge on the community's sewerage infrastructure or sewage treatment process
- The capability of the sewerage system (both transportation and treatment components) to accept the quality and quantity of the proposed liquid trade waste discharge
- The impact the liquid trade waste will have on the ability of the sewerage scheme to meet the Office of Environment and Heritage (OEH) licence requirements
- Compliance of the proposed liquid trade waste discharge with guideline limits in this policy
- The potential impacts of the discharge on the quality of, and management practices for, effluent and biosolids produced from the sewage treatment process
- The adequacy of the pre-treatment process(es) to treat the liquid trade waste to a level acceptable for discharge to the sewerage system, including proposed safeguards if the pre-treatment system fails
- Whether appropriate safeguards are proposed to avoid the discharge of other, non-approved wastes to the sewerage system.
- The adequacy of any chemical storage and handling facilities, and the proposed safeguards for preventing the discharge of chemicals to the sewerage system
- Whether prohibited substances are proposed to be discharged
- The potential for stormwater entering the sewerage system and adequacy of proposed stormwater controls
- Waste minimisation and water conservation programs

- The adequacy of the proposed due diligence program and contingency plan, where required

What can be discharged?

MCC places limits on how much liquid trade waste can be discharged to the sewer and what it can contain. As a guide, these are set out in the Limits tables in this section. The Tables cover general requirements and limits for inorganic compounds, organic compounds and metals. MCC may decide to vary these guideline limits, depending on which sewage treatment works will receive the waste.

Where businesses cannot meet the guideline limits, they must apply to MCC for permission to exceed them and provide justification for their request. Depending on the type of waste and the proposed contaminant levels, MCC may decide to refuse the application, or approve it subject to an effluent improvement program, or other conditions being implemented.

What can't be discharged?

Some liquid trade wastes are not suitable for discharge to the sewerage system. The List of Prohibited Substances in this section sets out those substances which must not be discharged.

Stormwater discharges

Stormwater is a prohibited discharge under this policy.

Sewerage systems do not have the capacity to carry stormwater. If it gets into the system, it can cause sewer overflows and cause operational problems. Therefore, MCC does not generally accept the discharge of stormwater to the sewerage system.

However, we realise that it may not always be possible or practical to prevent all stormwater entering the sewerage system at some liquid trade waste premises. The discharge of limited quantities of first flush water from such areas will be considered where roofing cannot be provided because of safety or other important considerations. The discharge from unsealed areas is not permitted.

Before MCC will consider a request for stormwater discharge, the applicant must provide the following information:

- Reasons why the area cannot be fully or partially roofed and banded to exclude stormwater
- Whether the open area is sealed
- The dimensions and a plan of the open area under consideration
- The estimated volume of the stormwater discharge
- Information on rain gauging
- Where a first-flush system is proposed, details on how the stormwater will be diverted to the drainage system after the first flush is accepted (the first-flush to be limited to first 10 mm of storm run-off)

- measures proposed for diverting stormwater away from the liquid trade waste generating area and
- Report on other stormwater management options considered and why they are not feasible.

Food waste disposal units

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

Existing installations in hospitals and nursing homes may be permitted, provided that wastewater is discharged through an adequately sized grease arrestor. For existing premises, a food waste disposal charge will be levied based on the number of beds in the hospital or nursing home.

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

Devices that macerate waste

Macerators and any other similar devices that are used for pulverising of solid waste must not be connected to MCC's sewerage system.

Solid waste includes, but is not limited to, sanitary napkin, placenta, surgical waste, disposable nappy, mache bedpan and urine containers. Therefore MCC will not accept any discharges from such devices into its sewerage system.

Additives in pre-treatment systems

MCC generally does not allow solvents, enzymes, bioadditives, and odour control agents to be used in pre-treatment systems (except neutralising chemicals designated for the pre-treatment).

Businesses who wish to use additives must apply in writing to MCC and obtain written approval before proceeding.

Guideline limits - General requirements

| 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. |
| BOD5 and Suspended solids | Normally, approved at 300 mg/L each. Concentration up to 600mg/L and in some cases higher concentration for low mass loadings may be acceptable if the treatment works has sufficient capacity and odour will not be a problem. |
| COD | Normally, not to exceed BOD5 by more than three times. This ratio is given as a guide only to prevent the discharge of non-biodegradable waste |
| Total dissolved solids | Up to 4000 mg/L may be accepted. However, the acceptance limit may be reduced depending on available effluent disposal options and will be subject to a mass load limit |
| Temperature | Less than 38°C. |
| pH | Within the range 7.0 to 9.0. |
| Oil and grease | 100 mg/L if the volume of the discharge does not exceed 10% of the design capacity of the treatment works, and 50 mg/L if the volume is greater than 10%. |
| Detergents | All industrial detergents are to be biodegradable. A limit on the concentration of 50 mg/L (as MBAS) may be imposed on large liquid trade wastes. |
| Colour | No visible colour when the waste is diluted to the equivalent dilution afforded by domestic sewage flow. |
| Radioactive substances | The discharge must comply with the <i>Radiation Control Act 1990</i> . |

Guideline limits - Inorganic compounds

| Parameter | Maximum concentration (mg/L) |
|--------------------------------|------------------------------|
| Ammonia (as N) | 50 |
| Boron | 5 |
| Bromine | 5 |
| Chlorine | 10 |
| Cyanide | 1 |
| Fluoride | 20 |
| Nitrogen (total Kjeldahl) | 100 |
| Phosphorus (total) | 20 |
| Sulphate (as SO ₄) | 500 |
| Sulphide (as S) | 1 |
| Sulphite (as SO ₃) | 15 |

Guideline limits - Organic compounds

| Parameter | Maximum concentration (mg/L) |
|--|------------------------------|
| Benzene | 0.04 |
| Toluene | 0.5 |
| Ethyl benzene | 1 |
| Xylene | 1 |
| Formaldehyde | 30 |
| Phenolic compounds (except pentachlorophenol) | 5 |
| Petroleum hydrocarbons (non flammable) | 30 |
| Pesticides general (except organochlorine & organo-phosphorus) | 0.1 |
| Polynuclear Aromatic Hydrocarbons (PAHs) | 5 |

Guideline limits – Metals

| Parameter | Maximum concentration (mg/L) | Allowed daily mass limit (g/d) |
|---|--|--------------------------------|
| Aluminium | 100 | - |
| Arsenic | 1 | 2 |
| Cadmium | 1 | 6 |
| Chromium* | 3 | 15 |
| Cobalt | 5 | 15 |
| Copper | 5 | 15 |
| Iron | 100 | - |
| Lead | 1 | 6 |
| Manganese | 10 | 30 |
| Mercury | 0.01 | 0.05 |
| Molybdenum | 5 | 30 |
| Nickel | 3 | 15 |
| Selenium | 1 | 15 |
| Silver | 2 [#] | 6 |
| Tin | 5 | 15 |
| Zinc | 5 | 15 |
| Total metals, excluding aluminium, iron, manganese and molybdenum | Less than 30 mg/L and subject to total mass loading requirements | |

* Where hexavalent chromium (Cr⁶⁺) is present in the process water, pre-treatment will be required to reduce it to the trivalent state (Cr³⁺), prior to discharge into the sewer. Discharge of hexavalent chromium (Cr⁶⁺) from chromate compounds used as corrosion inhibitors in cooling towers is not permitted.

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

Prohibited substances

The following substances may not be discharged to the sewerage system:

- Organochlorine weedicides, fungicides, pesticides, herbicides and substances of a similar nature and/or wastes arising from the preparation of these substances
- Organophosphorus pesticides and/or waste arising from the preparation of these substances
- 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'
- Chromate from cooling towers
- Natural or synthetic resins, plastic monomers, synthetic adhesives, rubber and plastic emulsions
- Rain, surface, seepage or subsoil water, unless specifically permitted
- Solid matter
- Any substance assessed by MCC as not suitable to be discharged into the sewerage system
- Waste liquids that contain pollutants at concentrations which inhibit the sewage treatment process, and
- Any other substances listed in a relevant regulation

PART 3 – Approvals, assessment, fees and charges, monitoring, enforcement

Liquid trade waste framework

The NSW framework for the regulation of liquid trade waste involves a preventive risk management approach. It has been developed to provide economic incentives for dischargers to minimise their waste and to consistently comply with their conditions of approval. It is comprised of the following measures:

- Monitoring, mentoring and coaching of dischargers in order to achieve cleaner production and assist them to comply with their conditions of approval.
- Preparation and implementation of a sound trade waste regulation policy, assessment of each trade waste application and determination of appropriate conditions of approval. The conditions must be consistent with the Council's *Manning Great Lakes and Karuah Sustainable Water Cycle Management Strategy* and demand management plan.
- Full cost recovery with appropriate sewer usage charges 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.
- Preparation and implementation of a sound Development Servicing Plan, with commercial sewerage developer charges to ensure new development pays a fair share of the cost of the required infrastructure.
- Enforcement, including appropriate use of penalty notices under section 222 of the *Protection of the Environment Operations Act 1997*. Orders may also be issued and penalties imposed for offences under sections 626, 627 and 628 of the *Local Government Act 1993*.
- Disconnection of a trade waste service in the event of persistent failure to comply with the MidCoast Council's conditions of approval.

The NSW framework for the regulation of liquid trade waste is consistent with that in the National Framework for Wastewater Source Management.

Application procedures

To obtain MCC's approval to discharge liquid trade waste to the sewerage system, applicants must:

- Complete the MCC Liquid Trade Waste Application form
- Provide information on the operation of the business and the waste produced
- Pay an application fee

Applications may be submitted by:

- The owner of the premises
- The operator of the business, providing he or she has the written permission of the owner

Applicants may be required to supply the following information:

Owner's details

- The site owner's full name, address and contact number

Business details

- Address of the business/industry
- Name of the business contact person and telephone contact
- Type of process/activity undertaken
- Normal hours of business operation

Liquid Trade waste details

- The process/activity generating the waste
- The expected rate of discharge, including:
 - the average discharge per day,
 - maximum discharge per day
 - maximum discharge per hour
 - the hours of the day during which the discharge will take place
- The type of waste to be discharged including:
 - the source of the waste
 - the expected maximum and average concentrations of pollutants
- Chemicals to be used - Material Safety Data Sheets (MSDS) should be supplied

Pre-treatment details

- Details of any proposed pre-treatment facilities, location and site plan. These details should include:
 - pre-treatment process details
 - internal wastewater drainage
 - pump size
 - rising main size, length and profile
 - system operational characteristics
 - operational procedures
 - provision for sampling and flow measurement (where required)
 - proposed connection point to the sewerage system
- Flow diagram and hydraulic profile of proposed liquid trade waste pre-treatment facilities
- Maintenance schedule for pre-treatment equipment, including contractor's details

Stormwater details

- Stormwater drainage plan
- Measures for prevention of stormwater ingress into the sewerage system

Waste management

- Justification for disposing of the waste into the sewerage system over other possible options (if any)
- Methods of disposal for other wastes that are not discharged to the sewerage system.

Environmental

- A manifest showing the location nature and chemical composition of all substances stored/used on site
- Any relevant environmental impact assessments

General

- Any additional information required - MCC may ask applicants to provide more details before making its decision

Details required for septic tank and pan waste discharges

- Identification of the pump out service provider
- Proposed method of discharge including plans and drawings if appropriate
- Details of any proposed facilities for a disposal point, location and site plan (if applicable). Details should include the proposed connection point to the sewerage system
- Security arrangements at the proposed disposal site (if applicable)
- The provision of freshwater for hosing down where needed
- Bunding and measures to prevent the ingress of stormwater at the proposed dump point, if applicable
- The use of odour inhibiting or other chemicals, if any, and their dosage rates
- Statement that septic effluent will not be mixed with septage or grease trap pump out, i.e. dedicated tankers will be used for each type of waste
- For boat marina facility—the type and number of vessels either moored at the marina and/or would utilize the pump-out facility on a regular basis, both private and commercial

An applicant may make a minor amendment, or withdraw the application before it is approved by MCC. He or she may also apply for a renewal or extension to an existing approval.

Assessment

There are three types of assessments for liquid trade waste:

- Liquid trade waste applications in Concurrence Classification A which MCC can assess “in house” because all councils already have authority from the Director-General of DPI to do so.
- Liquid trade waste applications in Concurrence Classification B and S which MCC can assess “in house” if concurrence is granted to the approval of these applications.
- Liquid trade waste applications in Concurrence Classification C for which MCC must apply on a case-by-case basis for concurrence to the approval.

Most applications will come under the first two criteria and can be processed relatively quickly, depending on the size of the business and the complexity of the process.

Matters which will require special application for concurrence generally relate to large operations, with high volumes or concentrations of trade waste and industrial waste. Applicants who are planning large scale operations are advised to consult with MCC as early as possible, to determine the requirements.

Approvals

MCC will issue the following approvals for liquid trade waste applications:

- Standard approval
- Approval subject to a Liquid Trade Waste Services Agreement.

The standard approval will apply to applications where liquid trade waste volumes and strength are sufficiently low to be controlled through standard conditions and monitoring regimes.

All standard approvals must include:

- The name of the business
- The activity approved
- The duration of the approval
- Conditions relating to the volume and type of waste discharged
- Conditions relating to installation of equipment
- Conditions relating to operation of equipment
- Conditions relating to maintenance and monitoring of equipment
- Inspection regimes.

Where an applicant proposes to discharge large volumes of liquid trade waste, or waste of a particular type or strength that requires frequent testing and monitoring, MCC will require a Liquid Trade Waste Services Agreement.

Once an application is approved, MCC will notify the applicant as soon as possible of the approval and any conditions which apply.

Where a Liquid Trade Waste Services Agreement is required, MCC will issue a deferred commencement approval under section 95 of the *Local Government Act 1993*, requiring the discharger to enter into the agreement within a specified time. In these cases, the approval will not be operative until the agreement has been signed.

Refusal

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

Change of ownership

An approval to discharge liquid trade waste to MCC's sewerage system is not transferable.

If there is a change of approval holder (either owner or occupier) or the activity, a new application and approval is required.

A new approval is not required where there is a change of:

- Owner, if occupier is the approval holder. New owner's consent is required to continue the activity (i.e. for the existing approval).
- Occupier, if owner is the approval holder and the activity is unchanged.

Charging categories

As part of the approvals process, all liquid trade waste dischargers will be allocated a Charging Category (1, 2, 2S or 3) and a Concurrence Classification (A, B, S, or C).

There are four Charging Categories:

Category 1 Dischargers

Category 1 liquid trade waste dischargers are those conducting an activity which requires nil or only minimal prescribed pre-treatment equipment, and whose effluent is well defined and/or of low strength, and of a relatively low risk/low impact to the sewerage system.

Category 2 Dischargers

Category 2 liquid trade waste dischargers are those conducting an activity which requires a prescribed type of liquid trade waste pre-treatment equipment, and whose effluent is well characterised. They are of medium or low risk to the sewerage system. The daily discharge must be less than 20 kL.

Category 2S Dischargers

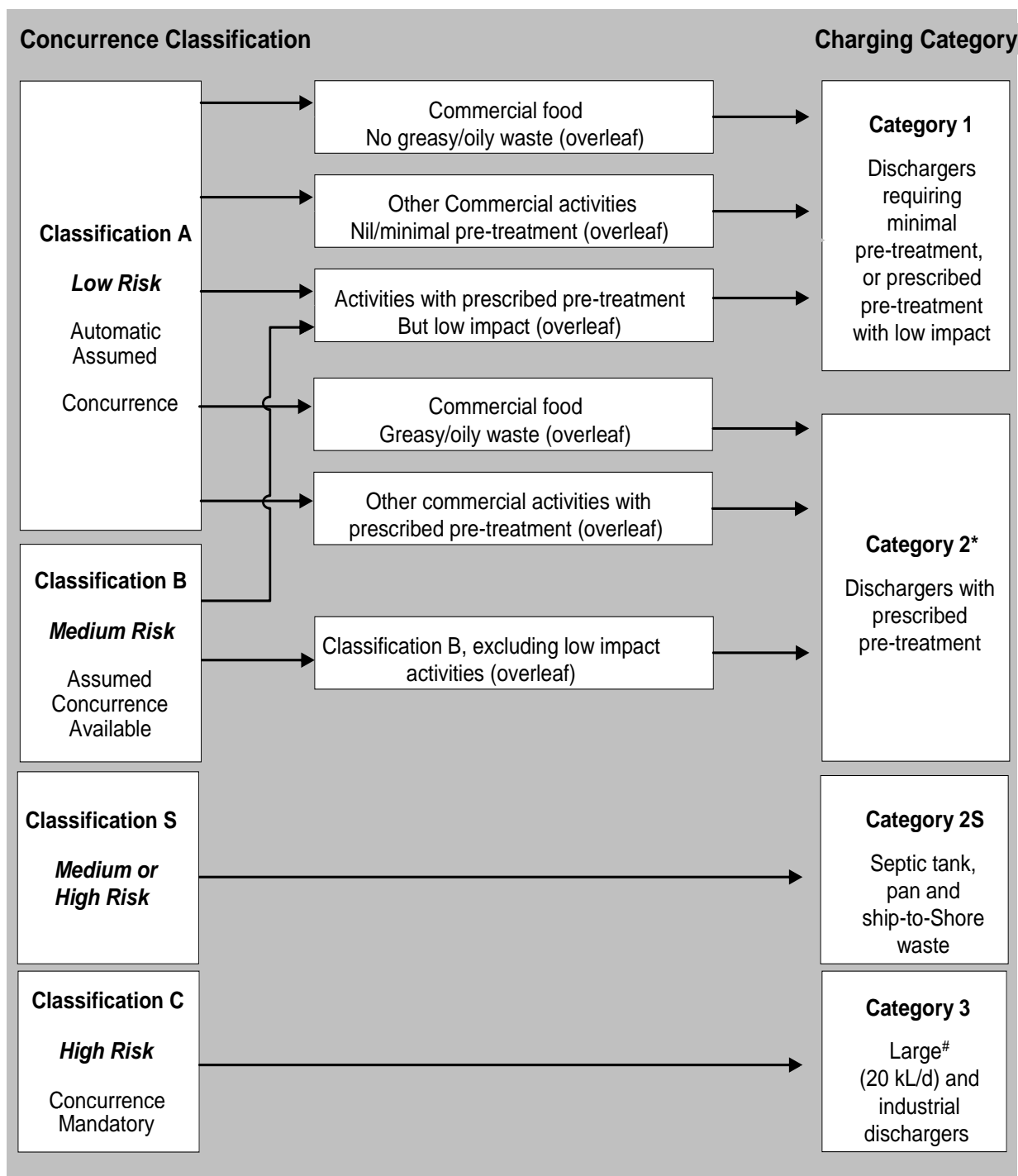
Category 2S dischargers are those conducting an activity of transporting and/or discharging septic tank or pan content waste into the sewerage system. All Category 2S dischargers must enter into a Liquid Trade Waste Service Agreement with MCC.

Category 3 Dischargers

Category 3 liquid trade waste dischargers are those conducting an activity which is of an industrial nature and/or which results in the discharge of large volumes (over 20 kL/d) of liquid trade waste to the sewerage system. They are of high risk to the sewerage system. All Category 3 dischargers must enter into a Liquid Trade Waste Service Agreement with MCC.

The charging category will be allocated for each application during the approval process using as a guide the list contained in the *Liquid Trade Waste Regulation Guidelines 2009* page 184-185.

Table of Concurrence Classification and Charging Categories



* Also includes fish shop (fresh fish for retail)

Except shopping complexes and institutions (hospital, educational facilities, correctional facilities, etc.).

These will be charged as Category 2 in accordance with activities carried out on the premises.

Liquid trade waste fees and charges

Liquid trade waste from industrial, commercial or other non-residential activities can impose significant costs on sewage transport and treatment facilities. To recover these costs, MCC levies appropriate fees and charges on businesses which discharge liquid trade waste.

Liquid trade waste charges are levied in addition to the two-part tariff Commercial Sewer Charges, for non-residential customers. Proposed fees and charges are advertised annually for public comment in MCC's draft Operational Plan.

MCC's liquid trade waste fees and charges may include:

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

Application fee

This fee recovers the cost of administration and technical services provided by MCC in processing liquid trade waste applications. The application fee will vary, depending on the category of discharge. Higher fees apply for Category 2 and 3 Dischargers, due to the complexity of processing the application. Application fees will be set annually.

Annual liquid trade waste fee

The purpose of this fee is to recover the cost incurred by MCC for administration and the scheduled inspections each year to ensure a liquid trade waste discharger's ongoing compliance with the conditions of their approval.

As part of an inspection, MCC may undertake monitoring of the liquid trade waste discharges from premises or business. This monitoring may include, but is not limited to, flow measurement and the sampling of the liquid trade waste. Where MCC needs to undertake monitoring of a discharger more than once in a financial year, the cost involved may be recovered from the discharger.

Annual liquid trade waste fees are determined on the basis of the category of the discharger and reflect the complexity of their inspection and administration requirements. The fees will be set by MCC, each year and included in the annual Operational Plan. Where the discharger is required to pay for monitoring this will be charged on the basis of full cost recovery.

Re-inspection fee



Where a discharger has not complied with the conditions of an approval and is required to address these issues, MCC may undertake re-inspections to confirm that remedial action has been satisfactorily undertaken. In this case, a re-inspection fee may be charged, on the basis of full cost recovery. If the re-inspection includes monitoring, the discharger may also be required to pay for the cost of the monitoring. The re-inspection fee will be determined, each year, by MCC.

Trade waste usage charge

The liquid trade waste usage charge is imposed to recover the additional cost of transporting and treating liquid trade waste. The charge is applied to Category 2 Dischargers, which generate effluent of substantially higher strength than domestic sewage. This charge is levied on the understanding that the discharger has the appropriate type and size of pre-treatment equipment, that is well maintained and functions within the parameters set by MCC. Where this is not the case, a higher charge may be applied.

Liquid Trade Waste Usage Charge (\$) = $Q \times \$W / \text{kL}$

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

W = the charging rate per kL, as determined by MidCoast Council on an annual basis.

MCC will determine the volume of liquid trade waste by applying a discharge factor. The discharge factor will be dependent upon the type and volume of business conducted at the site.

If MCC's inspection reveals that the pre-treatment equipment for a Charging Category 2 discharger has not been properly maintained, a non-compliance trade waste usage charge may be applied for the relevant billing period.

Excess mass charges

For Category 3 Dischargers, Excess Mass charges will apply for sub-stances discharged in excess of the deemed concentrations in domestic sewage. The charge will be calculated using the following equation:

Liquid Trade Waste Excess Mass Charge (\$) = $\frac{(S-D) \times Q \times U}{1000}$

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

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

Q = Volume (kL) of liquid trade waste discharge to the sewerage system.

U = Unit Charging rate (\$/kg) for discharge of substance to the sewerage system.

With regard to BOD, the above equation applies for BOD up to 600 mg/L.

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 |
| Sulphate (SO ₄) | 50 |
| Total Dissolved Solids | 1000 |

Excess mass charges for BOD exceeding 600 mg/L

If MCC approves the acceptance limits for BOD higher than 600mg/L, an exponential type equation will be used for calculation of a charging rate (\$/kg) as shown in the equation below. The equation provides a strong incentive for dischargers to reduce the strength of their waste.

Excess Mass charging rate (U) for BOD (\$/kg) =

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

Where C = the unit price (\$/kg) for BOD

The excess mass charge for BOD is calculated by using the following equation:

$$\text{Excess Mass Charge for BOD (\$)} = \frac{(S - D) \times Q \times U}{1000}$$

Where:

- S = Concentration (mg/L) of BOD in sample
- Q = Volume (kL) of liquid trade waste discharged to the sewage system
- U = Charging Rate(\$/kg) for disposal of BOD to the sewer system calculated using the equation on the previous page
- D = Concentration (mg/L) of BOD deemed to be present in domestic sewage

Food waste disposal charge

Where a food waste disposal unit has been installed at a hospital, nursing home, or other eligible facility, MCC may levy the following additional charge, payable annually:

$$\text{Food Waste Disposal Charge (\$)} = B \times U$$

Where: B = The number of beds in the hospital or nursing home
 U = The annual charging rate (\$/bed) for a food waste disposal unit.

NOTE: For existing installations only. New installations are not permitted.

Non-compliance charges

Category 1 & 2 Dischargers

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

Category 3 Dischargers

Non-compliance pH charge

Non-compliance pH charges may apply if the pH is outside the approved range. These charges provide an incentive for dischargers to apply appropriate pH correction so their waste remains within the approved pH limits. MCC may require industrial and large dischargers to install and permanently maintain a pH chart recorder or data logger as control of pH is critical to minimising odour and corrosion problems in the sewerage system.

Charging rate (U) for pH (\$/kL) where it is outside the approved range for the discharger =

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

Absolute value to be used

Where K = pH coefficient as determined by MidCoast Council

Non-compliance excess mass charges for BOD exceeding approval limit

If a discharger has failed to meet the approved maximum concentration of BOD on two or more instances in a financial year, the non-compliance excess mass charging rate for BOD U_n may be levied.

Non-compliance excess mass charging rate (U_n) for BOD (\$/kg) =

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

The non-compliance excess mass charge is then calculated using the following equation:

$$\text{Non-compliance excess mass charge for BOD (\$)} = \frac{(S - D) \times Q \times U_n}{1000}$$

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

Q = Volume (kL) of liquid trade waste discharged to the sewage system for the period of non-compliance

U_n = Charging Rate (\$/kg) for disposal of BOD to the sewer system calculated using the equation above

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

Non-compliance excess mass charges

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

In order to recover MCC's costs, the following equation may apply for non-compliance excess mass charges, except for BOD (where the approval limit non-compliance excess mass charge may apply).

Non-compliance excess mass charge (\$) =

$$\frac{(S - A) \times Q \times 2U}{1000} + \frac{(S - D) \times Q \times U}{1000}$$

Where:

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

Q = Volume (kL) of liquid trade waste discharged to the sewage system for the period of non-compliance

U = Charging Rate(\$/kg) for disposal of substance to the sewer system

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

A = Approved maximum concentration (mg/L) of pollutant as specified in MidCoast Council's approval (or liquid trade waste policy)

The non-compliance excess mass charges shown above are in lieu of the excess mass charges on page 22 & 23.

NOTE: MidCoast Council will continue applying the above non-compliance excess mass charge until the quality of discharge complies with MidCoast Council's approved quality (or the liquid trade waste policy) limits, within the time frame determined by MidCoast Council for remedying the problem.

If the discharger fails to rectify the problem within this time frame, the discharger may be required to cease discharging liquid trade waste into MidCoast Council's sewerage system and may also be required to pay a 'non-compliance penalty' as indicated in the following section.

Non-compliance penalty

The non-compliance penalty covers instances where MCC may seek compensation for its costs relating to legal action, damage to infrastructure, incurred fines and other matters resulting from illegal, prohibited or unapproved liquid trade waste discharged to the sewerage system.

Also included are fines under:

The *Protection of the Environment Operations Act 1997*, section 120(1) (Pollution of any waters by a discharger who fails to comply with the conditions of approval for discharge of liquid trade waste to sewer);

The *Local Government Act 1993*, section 627 (Failure to comply with an approval) and section 628 (Failure to comply with an order). Non-compliance penalties will be pursued by legal action.

Septic waste disposal charge

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

Septic tank waste disposal charge (\$) = Q x S

Where: Q = Volume (kL) of waste discharged to sewer.
S = Charging rate (\$/kL) for septic tank effluent and Septage waste disposal to the sewer system

Summary of charges

| Charging Category | 1 | 2 | 2S | 3 |
|--|-----|-----|-----|-----|
| Application fee | Yes | Yes | Yes | Yes |
| Commercial sewer charge | Yes | Yes | No | Yes |
| Annual liquid trade waste fee | Yes | Yes | No | Yes |
| Re-inspection fee (if required) | Yes | Yes | No | Yes |
| Liquid Trade waste usage charge/kL | No | Yes | No | No |
| Excess mass charges/kg | No | No | No | Yes |
| Septic Waste Disposal Charge | No | No | Yes | No |
| Non-compliance liquid trade waste usage charge/kL | Yes | Yes | No | No |
| Non-compliance Excess Mass Charge/kg & pH Charges/kL | No | No | No | Yes |
| Non-compliance penalty (if required) | Yes | Yes | Yes | Yes |

NOTE: Food waste disposal charge will apply where MidCoast Council has approved the use of an existing food waste disposal unit for a hospital, nursing home or other eligible facility.

Responsibility for payment

Property owners are responsible for the payment of fees and charges for water supply, sewerage and liquid trade waste services provided by MCC. Where another party (lessee) leases premises any reimbursement of the lessor (property owner) for such fees and charges is a matter between the lessor and lessee.

Inspections

MCC may carry out inspections of the premises of all liquid trade waste dischargers and their treatment facilities at least once a year. Additional monitoring requirements will apply to commercial premises preparing hot food, as per approval conditions.

Inspection of the large and industrial dischargers will be carried out as specified in approval conditions.

The applicant may be required to monitor the liquid trade waste discharge as a condition of an approval or agreement. They may also be required to pay for any sampling and testing of liquid trade waste undertaken by MCC.

For this purpose, an inspection/sampling point, where the waste can be inspected and sampled, will be specified in the approval and/or agreement.

This point will normally be located after the pre-treatment facility.

The discharger may need to install a suitable method of flow measurement.

MCC may require the discharger to:

- Install a permanent primary measurement device (such as a flow metering system)
- Measure the volume and flow rate using this system, or

Install a flow measurement device on a temporary basis and obtain enough data to:

- Determine a basis for assessing the flow rate and volume and
- Provide a system which allows obtaining a flow weighted composite sample.

Testing of samples is to be undertaken by a NATA-registered laboratory to ensure reliable and accurate results. Where the discharger is sampling the effluent, MCC may randomly take duplicates to confirm the waste characteristics.

Liquid trade waste agreements

Businesses who wish to discharge liquid trade waste in large volumes (discharge >20 kL/d) or industrial waste or Concurrence Classification S waste into MCC's sewerage system will be required to enter into a Liquid Trade Waste Services Agreement, as a condition of their approval.

The agreement, for a period of up to five years, will set out the conditions associated with the discharge. The business may not discharge any trade waste to the sewerage system until the agreement, or an interim agreement has been executed.

The conditions will be binding on the applicant and MCC.

In addition to MCC's approval conditions, the provision can be made in the agreement for:

- 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 MCC, the waste is adversely affecting the sewerage system or the environment
- Entry by MCC officers to inspect the liquid trade waste collection, treatment, monitoring and disposal systems

- The applicant to notify MCC in advance of any changes that may affect the quality and quantity of the liquid trade waste
- The amount of bond/security to be lodged with MCC prior to discharging to the sewerage system.

Enforcement of approvals

Anyone who fails to obtain MCC's approval to discharge liquid trade waste into the sewerage system, or fails to comply with the conditions of the approval, may be liable for a penalty under the *Local Government Act 1993*.

Polluting of any waters by a discharger of liquid trade waste without obtaining MCC's approval or failing to comply with the conditions of the approval is an offence under the *Protection of the Environment Operations Act 1997* and its regulations.

Anyone who fails to comply with the terms or conditions of a Liquid Trade Waste Services Agreement will be required to indemnify MCC against any resulting claims, losses or expenses in accordance with the agreement. Suspensions may also apply and may include a notice to cease the discharge.

Modification and revocation

MCC 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 anything arising after the approval which, had MCC known about it beforehand, would have influenced its decision on issuing the approval
- For failure to comply with a requirement made by or under the *Local Government Act 1993* relating to a condition of the approval; or
- For failure to comply with a condition of the approval.

Preventing water wastage

MCC supports the efficient use of water in all business operations. Where practicable, water should be recycled. It is an offence under section 637 of the *Local Government Act 1993* and its relevant regulation to waste or misuse water.

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

Effluent improvement programs

Where the liquid trade waste currently discharged does not meet MCC's requirements, the applicant may be required to submit an 'effluent improvement plan' setting out how the requirements will be met.

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

Due diligence programs

All Concurrence Classification C Dischargers must provide MCC with a Contingency Plan, within three months of approval, and a Due Diligence Program, within six months of approval.

Some Concurrence Classification B or S dischargers may also be required to submit contingency Plans and Due Diligence Programs, where MCC considers that the discharge may pose a potential threat to the sewerage system. If these programs are required, the Contingency Plan must be submitted within three months of the application and the Due Diligence Program, within six months.

However, if the discharger has an accredited environmental management system in place, a due diligence program and contingency plan may not be required. Proof of accreditation must be provided to MCC with the application.

The Environmental Management Plan (EMP) may not include all necessary provisions in regard to liquid trade waste. In such cases MCC may require that a suitable due diligence program and contingency plan be developed and submitted to MCC.

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

Glossary of terms

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

Biosolids: Primarily organic solid product produced by 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 oxidise organic and inorganic matter in wastewater by a strong chemical oxidant. Wastewaters containing high levels of readily oxidised compounds have a high COD.

Chemical Toilet: Toilet in which wastes are deposited into a holding tank containing a deodorizing or other chemicals; wastes are stored and must be pumped out (and chemical recharged) periodically.

Commercial Sewer Charges: Are a combination of both an access charge and a usage charge, applied to discharge to the sewerage system from non-residential premises and non-strata titled units, as determined in the annual MidCoast Council Operational Plan.

Contingency Plan: A set of procedures for responding to an incident that will affect the quality of liquid trade waste discharged to the sewerage system. The plan also encompasses procedures to protect the environment from accidental and unauthorised discharges of liquid trade waste to the stormwater drainage system, and leaks and spillages from stored products and chemicals.

Concurrence is required before a council may approve an application for the discharge of liquid trade waste or septic tank and pan waste to the sewerage system. It is a requirement under section 90(1) of the *Local Government Act 1993* that council obtain the written concurrence of the Director-General of the Department of Primary Industries (DPI) prior to approving such waste to be discharged to the council's sewerage system. Such concurrence request is to be provided to the NSW Office of Water.

Director-General: Director-General means the Director-General, DPI.

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 pre-venting the hazards.

Effluent: The liquid discharged following a wastewater treatment process.

Effluent Improvement Plan (EIP): The document required to be sub-mitted by a discharger who is not meeting the acceptance limits for discharge waste quality set down in Council's approval conditions and/or liquid trade waste agreement. The document sets out how a

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

Galley Waste: In this policy, a liquid waste from a kitchen or a food preparation area of a vessel; solid wastes are excluded.

Heavy Metals: Metals of high atomic weight which in high concentrations can exert a toxic effect and may accumulate in the environment and the food chain. Examples include mercury, chromium, cadmium, arsenic, nickel, lead 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.

Local Government Regulations: Regulations under the *Local Government Act 1993*, *Local Government (General) Regulation 2005*.

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

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

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: For the purpose of this Policy “pan” means any moveable receptacle kept in a closet and used for the reception of human waste.

pH: A measure of acidity or alkalinity of an aqueous solution, expressed as the logarithm of the reciprocal of the hydrogen ion (H⁺) activity in moles per litre at a given temperature; pH 7 is neutral, below 7 is acidic and above 7 is alkaline.

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

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

Prescribed Pre-treatment Equipment is defined as standard non-complex equipment used for pre-treatment of liquid trade waste, e.g. a grease arrestor, an oil arrestor/separator, solids arrestor, cooling pit (refer to Table 7 of *Liquid Trade Waste Regulation Guidelines 2009*).

Primary Measurement Device: A device such as a gauging pit, weir tank or flume installed in the liquid trade waste discharge line suitable for installation of instrumentation for flow measurement.

Septage: Material pumped out from a septic tank during desludging; contains partly decomposed scum, sludge and liquid.

Septic Tank: Wastewater treatment device that provides a preliminary form of treatment for wastewater, comprising sedimentation of settleable solids, flotation of oils and fats, and anaerobic digestion of sludge.

Septic Tank Effluent: The liquid discharged from a septic tank after treatment.

Ship-to-Shore Pump-out: Liquid waste from a vessel that may be considered for disposal to the sewerage system. This includes on-board toilet wastes, galley wastes and dry dock cleaning waste from maintenance activities.

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

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

Surfactants: The key active ingredient of detergents, soaps, emulsifiers, wetting agents and penetrants. Anionic surfactants react with a chemical called methylene blue to form a blue-chloroform-soluble complex; the intensity of colour is proportional to concentration.

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

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

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

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