

MODEL TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

March 2004

Department of Natural Resources, Mines and Energy and the Environmental Protection Agency.

This version of the Model Trade Waste Environmental Management Plan supersedes the version published in April 2002.

This version contains legislation updates resulting from the repeal of the *Sewerage and Water Supply Act 1949 and Standard Laws 1998* on 1 November 2003:

- The provisions of Chapter 3, Part 5 of the *Water Act 2000* relating to trade waste have been in force since 19 April 2002 (included in the April 2002 version of the Plan)
- Sanitary plumbing and drainage requirements and installations on premises are now covered by the *Plumbing and Drainage Act 2002* and the *Standard Plumbing and Drainage Regulation 2003*.
- The sections of the *Standard Sewerage Law 1998* that related to stormwater management have been included in the *Local Government Act 1993 (Chapter 13, part 7)*

Changes have also been made to a local government's powers to set charges and fees under the Local Government Act. Section 974 has been repealed. Relevant sections for charges are now 36, 973 and 1071A.

All changes made to the document since July 2000 are highlighted by shading.

All users of the Model Trade Waste EMP are encouraged to check and update their plans to ensure all relevant amendments made since the original July 2000 version are included.

This publication includes the **Model Trade Waste Environmental Management Plan** (Section B) and an accompanying **Explanation of the Model Trade Waste Environmental Plan** (Section C). These documents will be of particular interest to personnel involved in the management of trade waste and sewerage systems.

The Model Trade Waste Environmental Management Plan is a revision of the 1997 version of Section B, 'Model Policy Document' of the *Model Trade Waste Policy* published by DPI (1993, 1995). Copies of the Section B and Section C Amendments, July 2000 were sent to all local governments at that time.

Given the diversity of local government size, and changes to the business organisation of many local governments, the Model Trade Waste Environmental Management Plan (Part 2 of Section B) should be seen as a flexible document to be modified as required

by individual local governments to meet local needs. Alternatively, local governments may write their own policy and plan.

The Model TWEMP (Section B, Part 2) should be read together with the accompanying “Explanation of the Model Trade Waste Environmental Management Plan” which replaces Section C, ‘Explanation of Model Policy Document’ of the DPI *Model Trade Waste Policy (1993,1995)*.

The other sections of the *Model Trade Waste Policy*

- Section A: Guidelines for Policy Implementation
- Section D: Pre-treatment Guidelines for Trade Waste Discharge.
- Section E: Examples of Forms
- Section F: Waste Characterisation
- Section G: Charging Policy

have not been revised as these are essentially supporting technical information. However, users of Sections D and E will need to make relevant changes to references to legislation, category definitions, owner/generator, personnel who sign applications, agreements etc., to be consistent with the changes in legislation and their Trade Waste Environmental Management Plan.

ELECTRONIC COPY OF SECTION B

Section B, **Model Trade Waste Environmental Management Plan** is available, on request, in electronic format (Microsoft Word format). To obtain a copy contact:

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Model Trade Waste Policy

SECTION B

**MODEL TRADE WASTE
ENVIRONMENTAL MANAGEMENT PLAN**

To be read in conjunction with Section C:
Explanation of the
Model Trade Waste Environmental Management Plan

Amended March 2004

MODEL TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

This document is divided into two parts. The first discusses the need for a trade waste environmental management plan, while the second part provides a model plan as a guide for local governments.

PART ONE:

THE NEED FOR A TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

Purpose:

The purpose of the Model Trade Waste Environmental Management Plan (TWEMP) is to provide local government service providers, as providers of sewerage and trade waste services, with a planning framework to meet responsibilities under the:

- *Environmental Protection Act 1994*;
- *Water Act 2000*;
- *Environmental Protection (Water) Policy 1997* (referred to below as the EPP (Water)); and
- other legislation subordinate to the two above Acts (see Appendix 1, Model TWEMP).

Terminology:

Terminology used in this document may be interpreted by reference to the definitions in the Model TWEMP, which are generally drawn from the following documents:

- the *Water Act 2000*;
- the *Environment Protection Act 1994*;
- the *Environmental Protection (Water) Policy 1997*;
- the *Plumbing and Drainage Act 2002*;
- the *Standard Plumbing and Drainage Regulation 2003*; and
- AS3500 – National Plumbing and Drainage Code, Part 0: Glossary of Terms

Basis:

The need for planning the provision of trade waste services is described in a number of references ^(1,2). The Department of Primary Industries *Model Trade Waste Policy* ⁽²⁾ provides detailed guidance to local governments on trade waste planning issues.

The EPP (Water) establishes concepts of environmental values pertaining to water, as well as indicators, guidelines, and associated protocols (EPP (Water) part 3). The policy establishes a framework of water quality objectives, evaluation procedures, environmental management decisions, and water monitoring (parts 4 and 5). Part 6 of the policy deals with the management of certain specific types of water contamination and part 7 requires the preparation of environmental plans.

As providers of sewerage and trade waste services, local governments must, under sections 40-43 of the EPP (Water), develop and implement environmental plans in

four specific areas, one of which is the management of trade wastes. The environmental plan must seek to achieve the purpose of the EPP (Water) (section 35). Section 5 of the EPP (Water) states that the purpose of the policy is to achieve the object of the *Environmental Protection Act* in relation to Queensland waters. The object of the Act is set out in section 3 - “to protect Queensland’s environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends”. The meaning of this object is elaborated by subsequent sections of the Act (see below).

The model TWEMP contained in this document incorporates, and elaborates on, the essential elements of the *DPI Model Trade Waste Policy* ⁽²⁾ necessary to meet requirements under the Environmental Protection Act and the EPP (Water). In other words, local governments need to develop, as a minimum, a management plan in accordance with this model to demonstrate due diligence in meeting the requirements of the Environmental Protection Act and the EPP (Water).

Sewerage and trade waste management are functions which are currently addressed by some local governments under Total Management Plans (TMPs) ⁽¹⁰⁾. To avoid unnecessary duplication, Section 38 of the EPP (Water) allows a local government to achieve compliance with Sections 40 – 43 by implementing a plan which substantially complies with, but which was not originally prepared for, the EPP (Water).

Under Section 39(1) of the EPP (Water), a local government is required to report to the chief executive of the Environmental Protection Agency (EPA) on the development and implementation of environmental plans.

To avoid duplication, where environmental management plans for trade waste are developed as part of TMPs and a local government is reporting to the Department of Natural Resources, Mines and Energy (NRM&E) under the TMP process, it does not have to separately report to the EPA. It must however advise the EPA that it intends to comply with this aspect through the TMP process and report to NRM&E.

Queensland’s local governments vary in size, encompassing both rural communities handling only minor trade wastes, to cities where considerable amounts of trade waste of various types are processed. Given this range in size and activity, and changes to the business organisation of many local governments, the Model TWEMP (Part 2) should be seen as a flexible document to be modified to meet the need of individual local governments.

The Model TWEMP (part 2) should be read together with the accompanying Section C, Explanation of Model Trade Waste Environmental Management Plan (a revision of Section C of the earlier DPI Model Trade Waste Policy (1993, 1995) ⁽²⁾.

Smaller authorities need to develop plans appropriate to their situation within the guidance of the model. Due to the small scale of their operations, this should not be onerous. Advice is provided at the close of Part One on “cutting down” the scope of the model plan to suit small sewerage / trade waste systems.

Larger authorities need a more comprehensive approach. Many local governments in Queensland have already developed trade waste policies based on the *DPI Model Trade Waste Policy* ⁽²⁾. These authorities will need to review their trade waste policy in the light of the model TWEMP incorporating:

- revisions to the former *Model Trade Waste Policy*; and
- additional clauses required to meet the minimum requirements of an environmental plan under the EPP (Water).

Some large authorities, particularly those that have already developed *environmental management systems* under either the ISO 14000 standards or the more recent Australian Standards ^(4,5,6,7), or TMPs will find that they already meet (or come close to meeting) the requirement of the EPP (Water) planning process.

To comply, they may use their existing trade waste policy as a starting point and with appropriate additions as per the guidance contained in the model, develop an environmental management plan for trade waste.

Function:

The function of the model plan is to:

- provide local governments with a planning framework for trade waste management that controls trade waste entering the sewerage system; and
- assist local governments in demonstrating due diligence under Queensland legislation.

This involves both the planning phase and implementation of the plan (as required by the EPP (Water) in section 41(1)). The implementation phase will be based on appropriate budgetary provisions, capital works programs, operational programs, and regular monitoring, reporting and review.

Contents of the plan:

The contents of the plan (i.e. the requirements of the planning process) are based on:

- the requirements of the *Water Act*;
- the requirements of legislation subordinate to the *Environmental Protection Act 1994* and in particular the *Environmental Protection (Water) Policy 1997*
- the object of the *Environmental Protection Act* as elaborated by its requirements, and
- best practice, as required by the Environmental Protection Act.

Section 41(2) of the EPP (Water) requires that the local government must consider including in its plan:

- a) *requirements for waste prevention, recycling and treatment measures before the release of trade wastes to sewer may be authorised; and*
- b) *provisions about the effect of trade waste on –*
 - (i) *the recycling of waste water and sludge; and*
 - (ii) *the materials used to construct the sewerage system; and*
 - (iii) *the health and safety of people working on the sewerage system; and*

(iv) *the treatment capabilities of sewage treatment plants.*

In the context of establishing the object of the *Environmental Protection Act* (and the EPP (Water)), section (2)(c) of the Act provides that policies may “establish a program by which the stated objectives are to be achieved and maintained, including ... minimum standards .. for equipment for the control of contaminants ... and measures designed to protect the environment or minimise the possibility of environmental harm.”

The *Environmental Protection Act* also establishes environmental duties. Section 36(1) of the Act requires that: “*a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm.*”

Section 36(2) requires: “*in deciding the measures required to be undertaken under subsection (1), regard must be had to, for example:*

- a) *the nature of the harm or potential harm; and*
- b) *the sensitivity of the receiving environment; and*
- c) *the current state of technical knowledge for the activity; and*
- d) *the likelihood of successful application of the different measures that might be taken, and*
- e) *the financial implications of the different measures as they would relate to the type of activity.*”

Best practice changes and improves with time. Guidance on best practice can be found in national and State water management strategy documents, as well as international, national and State guidelines and codes of practice.

Australian and other Standards may be useful, but can represent best practice as it existed at a previous point in time. They can, however, be useful for setting minimum benchmarks.

Under the National Water Quality Management Strategy ^(8,9) a water quality management process should incorporate:

- national consistency in methods for setting goals, objectives and standards;
- clear and explicit administrative processes;
- clear and explicit assignment of responsibilities for the various phases of administration and operation;
- accountability, where progress towards the desired water quality goals is monitored and reported;
- matching of the administrative structures to the physical and social constraints, commonly on a catchment or sub-catchment basis;
- involvement of stakeholders in definitions of goals, development of plans, and implementation of strategies;
- administrative mechanisms responsive to change and development, including changing physical conditions over time, changing public preferences for water quality and resource management, and new technical options; and

- opportunities for harnessing market forces to the water quality management task.

The content of the model plan is based on the need to establish due diligence with respect to the Environmental Protection Act and the EPP (Water). The model plan meets the requirements of the Environmental Protection Act and the EPP (Water) through a “best practice” approach.

Many local governments will wish to go past minimum requirements. Particularly for medium to large sewerage systems, it is recommended local governments:

- develop and implement a comprehensive sewerage and trade waste management plan, expanding and elaborating the model where necessary, as part of their TMP process, and
- develop and implement an environmental management system, covering the authority’s water management activities: i.e. water conservation, provision of environmental water, water supply, stormwater management, and the provision of sewerage and trade waste services.

Applying the model to small local governments:

Local governments with only small sewerage systems and serving minor trade waste generators may wish to simplify the following model plan, while still meeting legislative and due diligence requirements.

In simplifying the plan, authorities should:

- refer to section 3.2 of Section A, “Guidelines for Implementation”, of the DPI *Model Trade Waste Policy* ⁽²⁾; and
- ensure that documentary records of the considerations required by the EPP (Water) section 41(2) (see above) are of an appropriate level of detail, scope and technical competence to satisfy due diligence and duty of care requirements.

If in doubt, it may be safer to follow the model, even if the result seems a little complex for a small sewerage operation. It is important that a local government’s plan is well defined so that it can deal fairly with both current trade waste generators and with new industries wishing to operate within its jurisdiction.

References:

1. Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council (1994). *Guidelines for Sewerage Systems Acceptance of Trade Waste* (Industrial Waste). National Water Quality Management Strategy.
2. Department of Primary Industries (1993,1995). *Model Trade Waste Policy*.
3. Department of Natural Resources (1997). Amended Model Policy Document, Section B, *Model Trade Waste Policy*.
4. AS/NZS ISO 14001: 1996 Environmental management systems – Specification with guidance for use.

5. AS/NZS ISO 14004: 1996 Environmental management systems – General guidelines on principles, systems and supporting techniques.
6. AS/NZS ISO 14010:1996 Guidelines for environmental auditing – General Principles.
7. AS/NZS ISO 14011:1996 Guidelines for environmental auditing – Audit procedures – Auditing of environmental management systems.
8. Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council (1994). *Water Quality Management - an Outline of the Policies*. National Water Quality Management Strategy.
9. Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council (1994). *Policies and Principles - A Reference Document*. National Water Quality Management Strategy.
10. Department of Natural Resources and Mines (2002). *A Guideline for Implementing Total Management Planning*

PART TWO:

MODEL TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

March 2004

..... **COUNCIL**

TRADE WASTE ENVIRONMENTAL MANAGEMENT PLAN

ENGINEERING DEPARTMENT, TRADE WASTE SECTION

March 2004

..... Council

Trade Waste Environmental Management Plan

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1. INTRODUCTION

Liquid wastes are produced by a variety of industrial, commercial and domestic activities. The *Environmental Protection Act 1994* provides a general prohibition against the pollution of the environment by the discharge of such wastes, except where the person or agency holds an environmental authority permitting such discharge.

All discharges to receiving waters are required to be treated to a standard that will maintain or enhance receiving water quality and environmental values.

Liquid waste generated by industry, small business and commercial enterprises is referred to as trade waste. The *Water Act 2000* prohibits the unauthorised discharge of wastes, other than domestic sewage, into the sewerage system. The options for producers of trade waste are to have it treated at an approved treatment facility, obtain approval from Council to discharge to the sewerage system, or to obtain an environmental authority under the *Environmental Protection Act 1994* to treat the waste themselves before discharge to the environment.

..... Council provides a sewerage system primarily for transporting and treating domestic sewage. Payment for this service is collected through sewerage charges on each rateable property. This system may also be used, with the approval of Council, for the acceptance and treatment of trade waste. As trade waste imposes an additional load on the sewerage system, trade waste charges apply.

Council is required to meet the conditions of the environmental authority (licence), issued by the Environmental Protection Agency (EPA), for its sewerage system including the disposal and reuse of treated effluent and biosolids. Council is also required by the *Water Act 2000* and the *Environmental Protection (Water) Policy 1997* (EPP (Water)) to fully assess the effect of trade waste on the sewerage system and the environment before issuing a trade waste approval.

Under the *Environmental Protection Act*, Council is held responsible for any pollution from stormwater outfalls under its control. The discharge of trade waste to stormwater drainage is prohibited under the *Local Government Act 1993**. The stormwater system must only be used for the disposal of uncontaminated stormwater runoff.

Domestic sewage consists mostly of water which, after treatment to reduce biodegradable material, suspended solids and nutrients, can be disposed of in accordance with its environmental authority requirements. Council is actively seeking opportunities to reuse and recycle treated effluent and biosolids.

Trade waste may have an organic strength many times that of domestic sewage and may overload the treatment facility. Trade waste may also contain other substances such as high levels of fats and grease, heavy metals, organic solvents and chlorinated

* See Chapter 13, Part 7 - Stormwater drainage

organic substances which sewerage systems are not designed to treat. These substances may:

- pose a serious risk to the safety and health of sewerage workers;
- damage the infrastructure of the sewerage system;
- inhibit biological processes at the treatment plant;
- accumulate in biosolids, making their reuse difficult or impracticable; or
- pass through the plant untreated resulting in environmental contamination.

To ensure the continued protection of our environment and waterways, Council's policy is to accept, subject to conditions, biodegradable waste into the sewerage system provided that:

- the system is of adequate capacity to effectively collect, transport and treat the waste; and
- all practicable waste minimisation, recycling and reuse options have been applied by the trade waste generator.

Discharge of waste containing substances in amounts liable to be toxic or hazardous to the sewerage system, treatment process, personnel or the environment is prohibited. Council may consider the acceptance of trade waste containing toxic or hazardous substances and non-degradable pollutants to sewer only after the waste has been pre-treated by on site "best practicable treatment" to ensure sewer admission limits are not exceeded.

In order to maintain community confidence in Council's sewerage operations, and in line with national practice, trade waste approvals are available for public scrutiny. Commercially confidential details may be withheld.

2. DEFINITIONS

Agreement

See *trade waste agreement*

Arrestor

An apparatus designed to intercept and retain silt, sand, oil, grease, sludge and other substances in a waste discharge.

Council

In this plan a reference to Council means the Council or any person appointed or authorised by the Council to act on behalf of Council as the case may require.

Biosolids

The treated solids (sludge), mainly organic, produced by sewage treatment.

Domestic sewage

Faecal matter and urine of human origin and liquid household wastes from water closet pans, sinks, baths, basins and similar fixtures designed for use in private dwellings.

Effluent

The liquid discharged following a wastewater treatment process.

Generator

See *trade waste generator*

Human wastes

Human faecal substances and urine.

Owner

As defined in the *Local Government Act 1993*

Permit

See *trade waste permit*

Premises

A lot as defined in section 1.3.5 of the *Integrated Planning Act 1997*, or for a lot under the *Body Corporate and Community Management Act 1997* or the *Building Units and Group Titles Act 1980*– the common property for the lot

Prohibited substances

A substance prescribed in Schedule 1 of the *Water Act 2000*.

Regulated waste

Non-domestic waste as mentioned in Schedule 7 of the *Environmental Protection Regulation 1998* (whether or not it has been treated or immobilised) and includes

- a) for an element – any chemical compound containing the element; and
- b) anything that has contained the waste.

Sewage

The wastewater from the community including all faecal matter, urine, household and commercial wastewater that contains human waste.

Sewerage or Sewerage System

A sewer, access chamber, vent, engine, pump, structure, machinery, outfall or other work used to receive, store, transport or treat sewage.

Stormwater Drainage

A drain, channel, pipe, chamber, structure, outfall or other work used to receive, store, transport or treat stormwater.

Trade waste

The water-borne waste from business, trade or manufacturing premises, other than:

- (a) waste that is a prohibited substance; or

- (b) human waste; or
- (c) stormwater.

Trade waste agreement (Agreement)

Trade waste approval for the discharge of liquid waste classified as Category 3. It states the terms and conditions to be met by the approval holder with respect to the discharge of trade waste into Council's sewerage system.

Trade waste approval

Written approval by Council for a person to discharge trade waste to Council's sewerage system. See *Trade waste agreement* and *Trade waste permit*.

Trade waste generator

Any person, owner, occupier, company or body whose activity produces or has the potential to produce trade waste.

Trade waste officer

Trade waste officer means a person holding appointment as a trade waste officer of the Council.

Trade waste permit (Permit)

Trade waste approval for the discharge of liquid waste classified as Category 1 or 2. It states the terms and conditions to be met by the approval holder with respect to the discharge of trade waste into Council's sewerage system.

3. TRADE WASTE POLICY

Purpose

To provide a liquid waste disposal service for domestic, commercial and industrial waste in accordance with the principles of environmental sustainability and in a manner which safeguards public health and is consistent with Council's responsibilities and obligations under Queensland legislation.

Objectives

- To safeguard public health and the environment.
- To prevent harm or injury to sewerage employees.
- To safeguard the sewerage system against damage, blockage or surcharging.
- To exclude non-biodegradable and potentially harmful substances that may:
 - lead to non-compliance with the conditions of Council's environmental authority issued by the EPA;
 - cause the treatment process to fail;
 - render effluent or biosolids unacceptable for reuse or disposal;

- cause physical damage to infrastructure; or
- cause any other detriment to the environment.

- To equitably recover the cost of services to commerce and industry including the cost of conveyance, treatment and disposal and, maintenance and repair of damage to the sewerage system.

- To provide operational data on the volume and composition of industrial and commercial effluent to assist in the operation of the sewerage system, the design of augmentations or new sewerage systems, and waste management reporting.

- To encourage waste minimisation and cleaner production, including waste prevention, recycling, and pre-treatment.

- To promote water conservation.

- To assist Council to meet its statutory obligations.

- To conform with the National Water Quality Management Strategy *Guidelines for Sewerage Systems, Acceptance of Trade Wastes* (Industrial Wastes), Agriculture and Resource Management Council of Australia and New Zealand and Australian and New Zealand Environment and Conservation Council, November 1994.

Process

Council aims to achieve these objectives by a process which is transparent, equitable, accountable, abreast of best practice, and responsive to changing community needs and concerns.

Policy instruments

The objectives will be achieved using a combination of policy instruments, including:

- sewer admission limits (acceptable concentration / mass limits for sewerable wastes);
- conditional trade waste approvals (permits and agreements);
- “user pays” pricing; and
- effluent improvement programs.

4. CONTROL OF TRADE WASTE

A list of legislation relevant to trade waste control and acceptance to sewer is given in Appendix 1. This is not a complete listing of all legislation pertaining to the control of trade waste.

It is an offence to discharge trade waste to the sewer unless a trade waste approval has been issued by Council (*Water Act 2000*). Any person wishing to discharge trade waste to sewerage must apply for a trade waste approval (see section 8).

A trade waste approval is the written approval from Council that states the requirements and conditions under which discharge to sewer is allowed. Two types of approval are referred to in this plan – a trade waste permit (Permit) for Category 1 and 2 wastes and a trade waste agreement (Agreement) for Category 3 wastes.

It is an offence for a person to discharge waste (including trade waste) other than uncontaminated stormwater to stormwater drainage (*Local Government Act 1993*).

4.1 SUSPENSION OR CANCELLATION OF TRADE WASTE APPROVAL

Grounds and procedures for suspension or cancellation of a trade waste approval are defined in section 471 of the *Water Act 2000*.

Terms and conditions of a trade waste approval in respect of any matter occurring before the suspension or cancellation, including the payment of charges owing, shall continue to have force and effect after the suspension or cancellation of the trade waste approval.

4.2 PENALTIES AND RECOVERY OF COSTS

Council may prosecute any person who commits a breach of the *Water Act 2000*, the *Local Government Act 1993* or the *Environmental Protection Act 1994* and its subordinate legislation, or who refuses or neglects to comply with any direction or requirement by Council pursuant to the above legislation, or other relevant legislation. Penalties are set out in the above legislation, and include substantial fines.

Council may recover costs of repairing the damaged sewerage system from a person causing damage to the system by discharging unauthorised material, making an unauthorised connection or interfering with infrastructure.

5. SEWER ADMISSION LIMITS

Any waste discharged to Council's sewer must comply with the Trade Waste Sewer Admission Limits as set out in Appendix 2 unless otherwise specified in the trade waste approval. These limits are subject to periodic review.

The sewer admission limits, unless otherwise specified in the trade waste approval, are absolute maximums.

The trade waste stream and domestic waste stream should, wherever practicable, discharge separately to the sewer. Where there is a common sanitary drain, allowance for the domestic component will be made to estimate the actual trade waste component strength.

Council requires that trade waste generators implement waste minimisation practices and install best practice pre-treatment processes to reduce both the volume and the contaminant load of wastes discharged to sewer.

The dilution of trade waste with water to achieve compliance with the sewer admission limits is prohibited. Council has obligations to avoid sewer overflows and consequently will impose limits on the rate and timing of trade waste discharges.

5.1 EFFLUENT IMPROVEMENT PROGRAMS

For Category 1 and 2 waste, the installation of a properly sized, approved best practice pre-treatment device, together with an acceptable maintenance program in accordance with the trade waste approval conditions will be deemed to provide a satisfactory effluent with respect to the General Limit Parameters(s) (Schedule 1, Appendix 2).

Council may, at its discretion, negotiate with a Category 3 trade waste generator to accept waste to sewerage that exceeds the Sewer Admission Limit(s) for certain General Limit Parameter(s) (Schedule 1, Appendix 2). Additional charges (section 7.1.2) may apply for such parameters.

Where such an agreement is made, Council may require the trade waste generator to undertake an effluent improvement program. This program should include:

- a description of the effluent quantity and quality;
- provision for monitoring and reporting waste quantity and quality;
- an examination of waste prevention and recycling options;
- an examination of options for the conservation of water;
- a program involving the development of waste reduction and pre-treatment aimed at reducing contaminant levels over a period of not more than three years to the prescribed admission limits. An action program must be provided, including expected outcomes, timelines and milestones;
- a report for Council, including a summary of achievements and options.

Category 3 trade waste generators will be advised in writing if Council requires them to develop an effluent improvement program. If, at the time the trade waste approval falls due for renewal, the holder of the approval has not completed a satisfactory effluent improvement program, the approval holder is required to write to Council requesting an extension of time with reasons.

Council may issue a new trade waste approval, subject to conditions that:

- (a) a satisfactory effluent improvement program be submitted within ?? days; and
- (b) that the trade waste approval may be varied after submission of the effluent improvement program as necessary to enforce the implementation of the program.

6. DISCHARGE CATEGORIES

All trade waste accepted to the sewer will be classified according to the following three categories for the purposes of a trade waste approval and charging.

Parameter	Category 1 low strength/low volume	Category 2 low strength / high volume	Category 3 high strength/ any volume
Biochemical Oxygen Demand (BOD ₅), mg/L	< 300	< 300	>300
Chemical Oxygen Demand (COD), mg/L	< 600	< 600	> 600
Suspended Solids, mg/L	< 300	< 300	> 300
Total Kjeldahl Nitrogen, mg/L N	< 80	< 80	> 80
Total Phosphorus, mg/L P	< 15	< 15	> 15
Volume, kL/annum	< 500	> 500	> 500
Trade waste approval	Permit	Permit	Agreement
Charges	Annual Charge (see section 7.1.1)	<ul style="list-style-type: none"> • Quantity based charge (see section 7.1.1) • Minimum charge applies 	<ul style="list-style-type: none"> • Quantity/Quality charge on total annual load (see section 7.1.1) • Minimum charge applies

Acceptance of waste under any category is conditional on the waste meeting Council's Sewer Admission Limits (section 5 and Appendix 2) unless otherwise specified in the trade waste approval.

It is the responsibility of the trade waste generator to install, operate and maintain "best practice" pre-treatment devices or processes to ensure sewer admission limits as approved are not exceeded.

In the event of a significant change in the strength or volume of a waste approved under Category 1 or Category 2, the waste will be treated as a Category 3 waste for the purposes of charging and monitoring.

7. TRADE WASTE CHARGES AND FEES

Trade waste charges and fees are levied under sections 36, 973 and 1071A of the *Local Government Act 1993*. Charges and fees will be determined by Council as part of the annual Budget process, however, charges under section 36 and regulatory fees under section 1071A can be amended at any time through out the year.

Trade waste charges and fees for the current financial year are listed in Appendix 3 and are also available from Council on request.

7.1 TRADE WASTE CHARGES

Trade waste is divided into three categories for charging purposes (section 6). Charges cover the cost of treatment and recurring administration and overhead costs associated with trade waste control.

(note deletion of paragraph on accounts)

7.1.1 GENERAL TRADE WASTE CHARGES

Charges are based on the actual quality and quantity of discharge for the period, not on figures described in the trade waste approval.

Charges will be determined as follows:

Category 1:

- An annual charge to cover the cost of treatment and recurring administration and overhead costs associated with trade waste control shall apply.

Category 2:

- A minimum charge to cover administration, inspection and compliance testing.
- A quantity charge on the total annual volume of trade waste discharged to the sewer to be calculated as follows:

$$C = Qk \quad \text{where}$$

- C is the annual charge (\$),
- Q is the annual volume (kL), and
- k is the unit charge rate (\$/kL).

The unit charge, k, which incorporates both volume and mass load costs based on domestic strength sewage, is based on the total cost of providing and maintaining the sewerage system for the total annual wastewater flow to the sewerage plant(s).

Category 3:

- A minimum charge to cover administration, inspection and compliance testing.
- A quantity and quality charge on the total annual discharge of trade waste to the sewer to be calculated as follows:

$$C = Qa + Qx_1n_1/1000 + Qx_2n_2 /1000 + \dots\dots\dots \quad \text{where}$$

- C is the total annual charge (\$),
- Q is the total annual discharge volume (kL),
- a[†] is the unit charge for volume (\$/kL),
- x₁, x₂ are the average concentrations of pollutants N₁, N₂ (mg/L),
- n₁, n₂ are the unit charges for pollutants N₁, N₂ (\$/kg),
- N₁, N₂ are the pollutants to be charged for.

- Charges shall be made for BOD₅ (or alternatively COD), suspended solids, (nitrogen, phosphorus,

7.1.2 ADDITIONAL CHARGES FOR OVER LIMIT DISCHARGE

This charge applies:

- Where Council agrees to accept to sewerage waste that has properties in excess of those defined in the General Limits (Schedule 1, Appendix 2) of the Sewer Admission Limits, and these conditions of acceptance are defined in the trade waste approval.
- Where a trade waste generator continually discharges waste to sewer in excess of the limits defined in the trade waste approval or the Sewer Admission Limits (Appendix 2) without approval to exceed the limits.

This charge shall apply to each non-complying parameter in addition to the general charges under section 7.1.1.

The formula for calculation is:

$$\text{Charge} = (\text{actual/approved})^d \times \text{charge rate } (\$/\text{kg}) \times \text{kg pollutant} \quad \text{where}$$

- d is a constant to be determined by Council;
- the minimum ratio for (actual/approved) is 1.0; and
- approved means the sewer admission limit value or other negotiated value defined in the trade waste approval.

[†] “a” is the unit charge for the volume component only and should not be confused with “k” (Category 2) which is a volume based charge which reflects the total cost of operation and treatment for the sewerage system for both volume and mass load based on domestic strength sewage.

The period of the charge will be the time period, based on the sampling frequency, over which the limits are considered by Council to have been exceeded.

7.1.3 EQUIVALENT ARRESTOR CHARGES

This charge applies where an existing waste stream requires the installation of an arrestor to provide best practice pre-treatment for Category 1 or Category 2 wastes, but site-specific conditions do not allow for appropriate devices to be installed.

In addition to the normal Category 1 or Category 2 charges (section 7.1.1), a charge equal to the average cost paid by other trade waste generators of similar waste type and quantity, to have arrestors regularly cleaned, will apply.

7.1.4 CHARGES FOR FOOD WASTE DISPOSAL UNITS

Trade waste generators in Categories 1 and 2 with food waste disposal units (garbage grinders, fruit and vegetable peelers) shall be charged a fee based on the power of the motor. This charge will apply in addition to general charges under section 7.1.1.

	Rated Power, watts	Units [#]
Category A	< 400	2C
Category B	400-700	6C
Category C	700-1000	8C
Category D	1000-1500	12C
Category E	1500-2000	14C
Category F	> 2000	16C

C is equivalent to the annual domestic sewage unit charge per pedestal.

7.2 TRADE WASTE FEES

7.2.1 INSPECTION AND ANALYSIS FEES

The trade waste charges in all categories (section 7.1.1) allow for routine inspections and quality compliance / auditing analyses by Council. Where additional inspections and laboratory analyses are required because of non-compliance with trade waste approval conditions, full costs will be recovered from the holder of the approval.

The cost of inspection shall be based on the charge out rate for the relevant Council staff involved and include time spent on site and travel to and from the site.

The full cost of any laboratory analyses shall be recovered.

7.2.2 APPLICATION FEES

Applications for approval to discharge Category 3 waste must be accompanied by the prescribed application fee.

No application fee is required for applications for the discharge of Category 1 and 2 wastes.

7.2.3 SEPTIC TANK AND OTHER LIQUID WASTE FEES

Licensed waste transporters (section 13) and other persons disposing of septic tank, portable toilet or other approved liquid waste to the sewer or sewage treatment plant under approved conditions shall be charged on a calculated volume basis (\$/kL) which takes account of both the volume and strength of the waste.

8. APPLICATION PROCEDURES

Any person wishing to discharge trade waste to sewer must make written application for an approval to discharge. Applicants should contact Council's Trade Waste Section for advice on the type of application required and the procedures for obtaining approval.

Applications should be lodged prior to commencement of trading. Examples of appropriate times for lodging applications may include:

- during the processing of a building application for new premises or extensions intended for industrial and/or commercial usage;
- change in tenancy of such premises;
- change of ownership of such premises;
- shop fit-outs of such premises;
- during the processing of an application to strata title such premises;
- existing premises where trade waste is generated and no trade waste approval has been issued; or
- where a change in process technology occurs.

Liquid waste disposal contractors wishing to discharge septic tank, portable toilet waste or other approved holding tank or liquid waste to the sewer or sewage treatment plant must be licensed (section 13) and must apply for an approval.

An application form and advice on how to complete the form, may be obtained in person from

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or will be forwarded on request by telephoning, or by writing to the Council at

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Failure to provide all required information will result in delays in approvals.

Applications for approval to discharge Category 3 waste are subject to an Agreement being negotiated and must be accompanied by the Application Fee (section 7.2.2 and Appendix 3).

Applications should include details of the proposed method of pre-treatment to be used to ensure waste meets sewer admission limits. ?? copies of treatment plans should be forwarded with the application. One copy will be returned stamped "approved- trade waste" if the proposal is satisfactory.

Any plumbing and drainage work associated with installing any treatment process shall be in accordance with the *Plumbing and Drainage Act 2002* and the *Standard Plumbing and Drainage Regulation 2003*, and the approved sewerage drainage plan. Plumbing and drainage work must be carried out by a licensed person.

Applicants are referred to Council's publication "Pre-treatment Guidelines for Trade Waste Discharges" for further guidance. A copy is available from:

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Where a waste is deemed to be non-sewerable, an approval will **not** be issued and alternative arrangements for disposal of wastes will have to be made. General advice on treatment and disposal options for non-sewerable waste may be obtained from the Council's Department, however detailed advice should be sought from appropriately qualified private consultants.

9. PERMITS AND AGREEMENTS

9.1 PERMITS

A trade waste generator producing waste assessed as suitable for sewer discharge and classified as Category 1 or Category 2 may be issued with a written trade waste approval in the form of a trade waste permit (Permit) which shall remain in force for the specified period unless cancelled sooner.

Trade waste permits are not transferable.

The Permit states the terms and conditions the holder of the Permit must observe to discharge trade waste to Council's sewerage. These may include, but are not limited to:

- expiry/renewal date;
- the location of the premises and nature of the occupancy;
- the type and composition of trade waste that may be discharged
- a statement that the quality of waste shall comply with Council's sewer admission limits as specified in Appendix 2 of the TWEMP (or attached to the Permit) and details of any allowed variations;
- the quantity of trade waste that may be discharged;
- the rate of discharge, including maximum rate of discharge;
- the time when trade waste may be discharged;
- the period for which trade waste may be discharged;
- the method for estimating or measuring discharge volume;
- provisions for measuring and sampling discharge prior to entry to sewer;
- details of any pre-treatment required;
- conditions for maintenance of, and removal of waste from, pre-treatment equipment including the frequency of cleaning and waste transporter to be used;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment;
- a statement that trade waste charges and fees apply in accordance with section 7 of the TWEMP; and
- any other conditions considered by Council to be appropriate.

(note deletion of paragraph on giving copy of permit to owner)

9.2 AGREEMENTS

A trade waste generator producing waste assessed as suitable for sewer discharge and classified as Category 3 may be issued with a written trade waste approval in the form of a trade waste agreement (Agreement). The Agreement shall remain in force for the specified period unless cancelled sooner.

Trade waste agreements are not transferable.

The Agreement states the terms and conditions the holder of the Agreement must observe to discharge trade waste to Council's sewerage. These include but are not limited to:

- expiry/renewal date;
- the location of the premises and nature of the occupancy;
- quality of waste that may be discharged;
- a statement that the quality of waste shall comply with Council's sewer admission limits as specified in Appendix 2 of the TWEMP (or attached to the Agreement) and details of any allowed variations;
- quantity of waste that may be discharged;
- rate of discharge - maximum instantaneous, maximum daily;

- hours of day, days of week discharge is allowed;
- requirements for/details of effluent improvement program;
- details of self-regulation monitoring program including
 - sampling point
 - frequency of sampling
 - method of sample collection and type of sample to be collected
 - analyses required
 - methods of analyses
 - laboratory to be used
 - data transfer and availability to Council;
- type, design and location of flow measuring equipment and requirements for calibration;
- methods to be used for estimation of data lost due to failure of sampling program or flow measurement instrumentation;
- provision for measurement and sampling of discharge prior to entry to sewer;
- pre-treatment processes to be used;
- conditions for maintenance of, and removal of waste from, pre-treatment equipment including the frequency of cleaning, waste transporter to be used ;
- records to be kept concerning the cleaning and maintenance of pre-treatment equipment and disposal of waste;
- the obligation of the trade waste generator concerning any variations to operation or treatment processes that may effect discharge quantity or quality including change of business type;
- a statement that trade waste charges and fees apply in accordance with section 7 of the TWEMP; and
- any other conditions relevant to the particular discharge as agreed.

(note deletion of paragraph on giving copy of permit to owner)

10. INSPECTION AND MONITORING

For the purpose of monitoring and auditing the conditions of discharge, Council shall routinely and randomly inspect all premises occupied by the holder of a trade waste approval.

Inspections may include, but not be limited to, the following:

- Check of all chemical storage areas to ensure that they are properly bunded and are not improperly connected to sewer.
- Checks to ensure that there are no illegal stormwater connections to the trade waste system or sewerage.
- Checks to ensure that there are no illegal tradewaste connections to stormwater or sewer and that there is no potential for trade waste to overflow improperly to sewer, stormwater or waterways.
- Checks to ensure that pre-treatment facilities are regularly and properly serviced and standby equipment is available where necessary.
- Monitoring of strength and flow is undertaken as required under the trade waste approval.

- Assessment of work practices to ensure that they do not result in a breach of the trade waste approval or legislation.

10.1 INSPECTION CHAMBERS AND/OR GAUGING FACILITY

Category 3 waste shall be discharged to Council's sewerage system through a suitable inspection chamber and/or gauging facility. The inspection chamber and/or gauging facility shall be located on the trade waste discharge line in an area accessible at all times to Council's officers, allowing for sampling and/or monitoring equipment to be installed and operated.

A suitable 240 volt power outlet and a standard water supply outlet with back-flow prevention device installed in accordance with AS 3500 Part 1 and AS 2845.3 and approved by Council is required at all gauging facility sites.

For new Category 2 and 3 installations, the trade waste discharge line shall be separate from the domestic waste discharge line. For existing installations retrofitting is not required except where it may be done during any proposed upgrading or alterations to the installation.

If a commercial or industrial premises generates trade waste but does not discharge trade waste to Council's sewerage system, a suitable inspection point shall be installed on the sanitary drain. It shall be in an accessible location within the property boundary and before connecting into the Council sewer. This is to enable checks to be made to ensure that trade waste is not being discharged to sewer.

Arrestor trap installations and other pre-treatment devices on premises discharging Category 1 and 2 waste shall have an inspection opening provided externally to the building, within the premises, at finished ground level.

11. DETERMINATION OF DISCHARGE QUANTITY

11.1 CATEGORY 1 AND 2

In the absence of an approved trade waste flow meter, the volume of trade waste discharged shall be estimated from total metered water consumption, less an allowance for domestic wastewater (based on ?? kL/annum per pedestal) and an allowance for water consumed on the property, based on a discharge factor.

Investigations have established a basis for estimating the proportion of water consumption discharged as trade waste by various types of trade and manufacturing processes. These will form the basis of the initial fraction applied when a permit is issued. Where there is no fraction available, 100 percent discharge will be assumed.

Where individual trade waste generators have information that would indicate a departure from these bases, application may be made for reconsideration of the fraction used.

High volume Category 2 trade waste generators may, and are encouraged to, install an approved flow measurement device to be calibrated as specified in the Permit conditions.

11.2 CATEGORY 3

The volume of trade waste discharged to the sewer shall be measured by an approved flow measurement device calibrated as specified in the Agreement. This should be located on the trade waste discharge stream, which should be separate from the domestic waste discharge stream.

Where the flow measured includes domestic wastewater, an allowance of “??” kL/annum per pedestal shall be made (*alternatively* “an adjustment, based on a discharge factor will be made”).

Trade waste generators exempt from installing a flow measurement device shall have the volume of discharge estimated as under section 11.1.

12. DETERMINATION OF DISCHARGE QUALITY

12.1 CATEGORY 1 AND 2

Quality measurements for Category 1 and 2 discharges are required for compliance checks only. This shall be done by Council as part of the inspection and monitoring program. The cost shall be covered by the annual trade waste charge, except where additional inspection and testing is required because of non-compliance, when Council shall charge the holder of the approval as prescribed in section 7.2.2 and Appendix 3.

12.2 CATEGORY 3

Quality measurements are required for both charging and compliance purposes.

For charging purposes, a system of self-monitoring by the trade waste generator shall be used to collect sufficient data to enable the mass load for the designated charging period to be calculated. Where pre-treatment is required to meet sewer admission limits for specified parameters, self-monitoring will be required for those parameters, or a suitable surrogate, to confirm satisfactory pre-treatment.

Requirements for self-monitoring and auditing by Council shall be specified in the Agreement.

The holder of the Agreement shall meet all costs of self-monitoring.

Council shall inspect the premises and collect and analyse samples for overall assessment of compliance with sewer admission limits and Agreement conditions as part of its inspection and monitoring program. The cost is covered by the annual trade waste charge.

Where additional inspection and testing is required to be done by Council as a result of non-compliance, Council shall charge the holder of the Agreement as prescribed in section 7.2.2 and Appendix 3.

13. SPECIFIC REQUIREMENTS FOR COMMERCIAL AND INDUSTRIAL WASTES

13.1 REMOVING REGULATED WASTE FROM PREMISES

Removing regulated waste from a premises shall only be carried out by waste transporters licensed in accordance with the *Environmental Protection Act* and the *Environmental Protection Regulation 1998* and transported, stored, treated or disposed of in accordance with the requirements of the *Environmental Protection Regulation 1998* and the *Environmental Protection (Waste Management) Regulation 2000*.

No person shall discharge or cause to be discharged directly or indirectly to sewerage, wastes from any waste transport vehicle without a trade waste approval.

Removing and disposing of septic tank waste, portable toilet waste and holding tank waste shall only be done by a licensed waste transporter. Such waste may be disposed of to sewerage in accordance with approval conditions.

Waste from grease and oil arrestors, other than treated effluent from approved installations (section 13.2), shall not be disposed of to the sewerage system. Such wastes shall be disposed of in a manner and/or at a site approved in accordance with requirements of the *Environmental Protection Act* and the *Environmental Protection Regulation 1998* and the *Environmental Protection (Waste Management) Regulation 2000*.

All waste transporters shall be required to maintain records as prescribed by Council to account for all waste collected and disposed of within or outside Council's local government area.

Trade waste charges in accordance with Section 7.2.3 and Schedule VI Appendix 3 will apply to all transported liquid and sludge waste approved for discharge to sewerage.

Advice on the disposal of liquid waste not suitable for discharge to sewerage may be obtained from:

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13.2 ARRESTOR INSTALLATIONS

Where arrestor installations are required to pre-treat waste before discharge to sewer they must be of a design and capacity approved by Council.

13.2.1 GREASE ARRESTORS

Guidance on the sizing and installation of grease arrestors is available from

- Council's Pre-treatment Guidelines for Trade Waste Discharges
- ... (sections 39 and 40, *Standard Plumbing and Drainage Regulation, 2003*)
-
-

The maximum capacity of an individual grease arrestor shall be 2000 litres. Where the capacity requirement for a premises is greater than 2000 litres, additional arrestors shall be used, with each arrestor to be a discrete installation separately treating a defined waste stream.

Where it is intended that several trade waste generators share the use of a grease arrestor, the following information is required to be clearly tabled on the plan submitted with the application for approval:

- the size of the arrestor;
- details of the loading to be discharged by each trade waste generator;
- the names of the businesses and shop number(s) sharing the arrestor.

Grease arrestors must be located so as to allow appropriate access for inspection, pump out and cleaning. Where practicable, a hose cock with suitable backflow prevention is to be provided for cleaning. The location must be approved by Council prior to installation.

All grease arrestors shall be fitted with full length and width opening, gas tight covers and frames.

The use of solvents, enzymes, mutant or natural bacterial cultures, odour control agents or pesticides in grease arrestors is prohibited unless specifically approved by Council. Conditional approval may be given to allow the trade waste generator to demonstrate to Council that the product to be used does not adversely impact on the sewerage system or the environment.

Maintenance cleaning of grease arrestors shall be carried out on a regular basis in accordance with conditions of the trade waste approval by a waste transporter licensed under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 1998*.

In a situation where a grease arrestor is required for pre-treatment but can not be installed because of specific site constraints an equivalent arrestor charge (section 7.1.3) will apply.

13.2.2 MINERAL OIL ARRESTORS

Appropriately sized mineral (petroleum) oil arrestors for the treatment of oily wastewater will be approved in most circumstances. Acceptable methods include:

- coalescing plate separators;
- membrane technology;
- dissolved air flotation (DAF);
- chemical precipitation;
- hydrocyclones;
- triple stage interceptors; and
- other apparatus /methods.

Each application will be assessed on the nature of the oily waste to be treated, the proposed treatment method and site location.

Subject to recommendations by the manufacturers of plate separators, “Quick Break Detergents” may be used with plate separation units.

Maintenance cleaning of mineral oil arrestors shall be carried out on a regular basis in accordance with conditions of the trade waste approval. Removal of oily waste shall be done by a waste transporter licensed under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 1998*.

13.2.3 OTHER ARRESTOR APPLICATIONS

Arrestor installations may be used for other trade waste treatment applications such as:

- silt separation;
- cooling;
- neutralisation; and
- other specific applications approved by Council.

Each application will be assessed on the nature of the waste to be treated, the proposed treatment method and site location.

Maintenance cleaning of arrestors shall be carried out on a regular basis in accordance with conditions of the trade waste approval by a waste transporter licensed under the *Environmental Protection Act 1994* and the *Environmental Protection Regulation 1998*.

13.3 ENZYMES / BIOLOGICAL ADDITIVES

13.3.1 ENZYME AND BACTERIAL CULTURES

Enzyme and mutant or natural bacterial cultures may be permitted for use in certain biological pre-treatment systems by way of specific application to Council.

Applicants will need to demonstrate to Council that the product to be used does not adversely impact on the sewerage system or the environment.

13.3.2 GENETICALLY MODIFIED ORGANISMS (GMOs)

The use of genetically modified organisms (GMOs) is regulated under the *Gene Technology Act 2000* (Commonwealth legislation) and *Gene Technology Act 2001* (Queensland legislation).

Any person wishing to discharge commercial products containing genetically modified organisms to sewerage must first obtain approval from the Gene Technology Regulator, Canberra for the release of organisms. Council may then grant approval for discharge to sewerage.

Laboratories and other facilities which culture, package or transport GMOs must have sufficient procedures and pre-treatment equipment in place to ensure that no live GMOs are discharged to sewerage.

13.4 FOOD WASTE DISPOSAL UNITS

Food waste disposal units (garbage grinders / sink-to-sewer disposal units) may be approved for non-domestic use by specific application to Council. Where installation is approved, the annual charge shall be based on motor power (section 7.1.4 and Appendix 3) for Category 1 and Category 2 approvals.

13.5 COMMERCIAL SWIMMING POOLS / ORNAMENTAL PONDS

The backwash water and water from commercial and public swimming pools and ornamental ponds may not be discharged to sewer without approval through the issue of a trade waste approval. Trade waste charges in accordance with the discharge category will apply.

13.6 MEDICAL, CLINICAL, VETERINARY AND INFECTIOUS WASTES

Clinical and related waste should be managed in accordance with the requirements of the *Environmental Protection (Waste Management) Regulation 2000*.

Solid wastes from any hospital, clinic, office or surgery of a medical or veterinary facility or laboratory, convalescent or nursing home or health transport facility including, but not limited to, hypodermic needles, syringes, instruments, utensils, swabs, dressings, bandages, or any paper or plastic item of a disposable nature, or any portions of human or animal tissue, shall not be discharged to the sewer.

Discharging liquid wastes including faeces and body fluids to sewer from any hospital, clinic, office or surgery of a medical or veterinary facility or laboratory, convalescent or nursing home or health transport facility is permitted in accordance with the *National Guidelines for Waste Management in the Health Industry, 1999*, National Health and Medical Research Council.

Infectious or hazardous liquid wastes deemed to pose a threat to public health and safety may not be discharged to the sewer without approval from Council. Such wastes shall require treatment to render them non-infectious or non-hazardous prior to discharge. When approved for discharge, trade waste charges will apply.

13.7 CONTAINMENT OF TOXIC / HAZARDOUS SUBSTANCES

Any potentially toxic or hazardous substances shall be stored in bunded areas where leaks, spillage, or overflows cannot be drained by gravity or by any automated mechanical means to sewerage or the stormwater drainage system.

Bunding of toxic or hazardous substances shall meet recommendations of applicable best practice guidelines, standards, or codes of practice.

13.8 DISCHARGE OF LIQUID WASTES FROM VESSELS, VEHICLES AND AIRCRAFT

13.8.1 VESSELS

Depending on the quality, the discharge of certain galley and toilet wastes from vessels may be permitted via approved "pump out" facilities at ports and marinas. The operator of such facilities must hold an approval for discharge to sewerage.

Charges in accordance with section 7.2.3 will apply.

The discharge of untreated bilge water to the sewer is prohibited.

13.8.2 BUSES, AIRCRAFT, RECREATIONAL VEHICLES

The discharge of toilet waste from buses, aircraft or recreational vehicles may be permitted at approved discharge locations such as bus or transport depots, terminals, and caravan parks. The owner of the premises on which such facilities are located must hold an approval for discharge to sewerage and discharge must be in accordance with the approval conditions.

Charges in accordance with section 7.2.3 will apply.

13.9 LANDFILL LEACHATE & DISPOSAL FACILITY WASTEWATER

Leachate from landfill sites and wastewater from waste treatment/disposal facilities constitutes a trade waste and may not be discharged to sewer without approval through the issue of a trade waste approval.

Charges in accordance with the discharge category classification will apply.

13.10 DISCHARGE FROM OPEN AREAS

The discharge of rainwater and stormwater to sewer is prohibited.

The ingress of surface water from a potentially contaminated open area to sewerage can cause severe operational problems for Council. However, there may be circumstances when it is environmentally beneficial to accept these wastes to the sewer under strict controls.

The discharge to sewer from any potentially contaminated open area that is raised or bunded may be considered, provided the quality and quantity requirements of this plan are met.

Applicants should note that an open area approval is not an alternative to the appropriate management of polluted areas such as roofing or other methods to keep water away from the open area. Applicants must demonstrate to Council that all appropriate measures to keep runoff water away from the potentially contaminated open area have been taken.

A trade waste approval is required to discharge such waste.

All applications for sewer discharge from open areas must have controls incorporated in the design that will, in the opinion of Council ensure that:

- all contaminated liquid waste is pumped to sewer at a rate acceptable to Council;
- all discharge to sewer ceases automatically after a predetermined level of rainfall volume (mm) and/or intensity (mm/hr) to be set by Council;
- the "first flush" volume is collected and segregated during wet weather with additional runoff directed to the storm water system. Applicants should seek advice from Council on the required "first flush" volume to be collected;
- the "first flush" volume collected is pumped to sewer, after any necessary pre-treatment, no sooner than one (1) hour after the rain stops;
- a suitable device for the determination of sewer discharge flow and volume to be installed.

Charges in accordance with the discharge category classification will apply.

14. DISCRETIONARY POWER

Notwithstanding the provisions of this policy, due to the complexity of many industrial wastes and the need to protect Council's sewerage system, employees, and the environment, acceptance of any given trade waste to sewer will always be at the discretion of Council.

15. IMPLEMENTATION

This plan will become effective from, and will be implemented over a phase in period of years for existing businesses. New businesses commencing afterwill be required to fully comply with the policy from their date of commencement.

The schedule of charges in Appendix 3 reflect the full cost to Council of the control and treatment of trade waste. During the phase in period, total charges will be detailed in accounts but actual charges will be as follows:

- Year 1 30 percent of total charge
- Year 2 60 percent of total charge
- Year 3 100 percent of total charge

For the following charges and fees:

- I General trade waste charges
- II Additional charges for over limit discharge
- III Equivalent arrestor charges
- IV Charges for food waste disposal units
- VII Septic tank and other approved liquid waste

- Total Charges as per Appendix 3 will apply at the commencement of this plan for:
 - V Inspection and analysis fees
 - VI Application fees

16. RECORDS AND REPORTS

Council will develop a waste database for the purpose of maintaining, in a publicly accessible form, information on waste generation within Council's local government area. The database will list information on wastes routinely produced by commerce and industry, by location, volume and character.

A component of the database will contain trade waste information based on information produced by holders of trade waste approvals, and from monitoring conducted by or under Council direction. Both solid and liquid wastes will be recorded.

The waste database will facilitate the local recycling and reuse of waste, and will assist the Council in waste management planning and reporting.

Council will report annually on the implementation of its trade waste environmental management plan to the Environmental Protection Agency / the Department of Natural Resources, Mines and Energy through the Total Management Planning process.

APPENDIX 1

SELECTED LEGISLATION RELEVANT TO TRADE WASTE

Water Act 2000

Environmental Protection Act 1994

Environmental Protection (Water) Policy 1997

Environmental Protection Regulation 1998

Environmental Protection (Waste Management) Policy 2000

Environmental Protection (Waste Management) Regulation 2000

Local Government Act 1993

Integrated Planning Act 1997

Plumbing and Drainage Act 2002

Standard Plumbing and Drainage Regulation 2003

Radiation Safety Act 1999

Radiation Safety Regulation 1999

Gene Technology Act 2001 (Queensland legislation)

Gene Technology Act 2000 (Commonwealth legislation)

APPENDIX 2

SEWER ADMISSION LIMITS

The upper limits for the quality of trade waste discharged to the sewer for all categories are set out below. These admission limits shall apply from They are subject to periodic review.

Schedule I. GENERAL LIMITS

Parameter	Concentration, mg/L except *
Temperature *	< 38°C
pH *	6 - 10
Biochemical Oxygen Demand (BOD ₅) ++	
Chemical Oxygen Demand (COD) ++	
Total Organic Carbon (TOC) ++	
Suspended Solids ++	
Total dissolved solids (TDS) ++	
Total oil/grease ++	200
Gross solids *	non faecal gross solids shall have a maximum linear dimension of less than 20mm and a quiescent settling rate of less than 3m/hr.
Colour *	limited such as not to give any discernible colour in treatment works discharge
Odour *	not detectable in 1% dilution or causing an odour problem in Council's sewerage system
Chlorine (as Cl ₂)	10
Sulphate (as SO ₄ ⁻) #	2000
Sulphite (as SO ₂)	100
Surfactants - Anionic (MBAS)	500
Aluminium (as Al) #	100
Iron (as Fe) #	100
Ammonia plus ammonium ion (as N) #	100
Total Kjeldahl Nitrogen (as N) #	150
Total Phosphorus (as P) #	50
Manganese (as Mn)	100

+ The total mass load and the capacity of the sewerage system to accept the load shall be considered for each application.

Council may in some circumstances accept waste containing higher concentrations of these substances. Additional charges for treatment (section 7.1.2) will apply.

++ specify analytical method

Schedule II PROHIBITED DISCHARGES

- Prohibited substances as defined in Schedule 1 of the *Water Act 2000*
- Flammable/explosive substances.
- Radioactive substances except as allowed for under the *Radiation Safety Act 1999* and the *Radiation Safety Regulation 1999*.
- Pathological and infectious waste and Cytotoxic waste except as allowed for under the *National Guidelines for Waste Management in the Health Industry*, National Health and Medical Research Council, 1999.
- Genetically modified (engineered) organisms.
- Rainwater and stormwater and uncontaminated water.

Schedule III SPECIFIC LIMITS - INORGANIC

Parameter	Concentration, mg/L
Boron (B)	100
Bromine (Br ₂)	10
Fluoride (F ⁻)	30
Cyanide (CN ⁻)	5
Sulphide (S ²⁻)	5

Schedule IV SPECIFIC LIMITS - METALS

Parameter	Maximum Concentration mg/L	Lower Daily Mass Load g/day
Arsenic (As)	5	15
Cadmium (Cd)	2	6
Chromium (Cr)		
Total	20	75*
Hexavalent	10	
Cobalt (Co)	10	30
Copper (Cu)	10	75
Lead (Pb)	10	30
Mercury (Hg)	0.05	0.15
Nickel (Ni)	10	30
Selenium (Se)	5	15
Silver (Ag)	5	15
Tin (Sn)	10	30
Zinc (Zn)	10	75

The concentration values apply to discharges having a daily mass load between the Lower Daily Mass Load (LDML) and the Upper Daily Mass Load (UDML). For small discharges with a daily mass load below the LDML, no concentration limits apply. Dischargers who exceed Council's UDML limits will be required to take measures to meet the UDML. This may involve treating to a lower concentration than indicated above.

* For discharges below the Lower Daily Mass Load, hexavalent Cr must be reduced to trivalent Cr.

Schedule V. SPECIFIC LIMITS - ORGANIC

Council may request specific demonstrable evidence based on degradability and toxicity concerning substances listed below.

Parameter	Maximum Concentration, mg/L
Formaldehyde (HCHO)	50
Phenolic compounds (as Phenol)	100
Pentachlorophenol	5
Petroleum hydrocarbons	30
Halogenated Aliphatic hydrocarbons	5
Halogenated Aromatic Hydrocarbons (HAHs)	0.002
Polychlorinated biphenyls (PCBs)	0.002
Polybrominated biphenyls (PBBs)	0.002
Polynuclear Aromatic Hydrocarbons (PAHs)	5
Pesticides: General(insecticides /herbicides/fungicides)**	1.0
Pesticides: Organophosphates	0.1
Azinphos-methyl	
Azinphos-ethyl	
Coumaphos	
Demeton	
Dichlorvos	
Dimethoate	
Disulfoton	
Fenitrothion	
Fenthion	
Malathion	
Methamidophos	
Mevinphos	
Omethoate	
Oxydemeton-methyl	
Parathion	
Triazophos	
Trichlorfon	
Pesticides- Organochlorines	
Aldrin	0.001
Chlordane	0.006
DDT	0.003
Dieldrin	0.001
Heptachlor	0.003
Lindane	0.100

** This category covers all pesticides other than those specifically listed under organophosphate and organochlorine pesticides.

Schedule VI. Any substance not listed in the above tables is a prohibited discharge and may not be discharged without prior approval of Council. Council may request specific demonstrable evidence based on degradability and toxicity for any substance when assessing acceptance to sewer.

APPENDIX 3

TRADE WASTE CHARGES AND FEES FOR/..... FINANCIAL YEAR

Trade waste charges and fees for the/..... financial year are listed below. These charges are reviewed annually by Council as part of its budget process. If the charges listed below are not those for the current financial year, the correct charges may be obtained by telephoning on

I: General trade waste charges (section 7.1.1)

Category 1	Annual charge	\$	per annum
Category 2	Volume	\$	per kL
	Minimum charge	\$	per annum
Category 3	Volume	\$	per kL
	BOD ₅	\$	per kg
	Suspended solids	\$	per kg
	Minimum charge	\$	per annum

II: Additional charges for over limit discharge (section 7.1.2)

For all parameters:

d =

Charge/kg = \$

Approved means Sewer Admission Limit unless otherwise specified in trade waste approval

III: Equivalent arrestor charges (section 7.1.3)

\$ /annum

IV: Charges for food waste disposal units (section 7.1.4)

	Rated Power, watts	Units [#]
Category A	< 400	2C
Category B	400 - 700	6C
Category C	700 - 1000	8C
Category D	1000 - 1500	12C
Category E	1500 - 2000	14C
Category F	> 2000	16C

#C is equivalent to the annual domestic sewage unit charge per pedestal

V: Inspection and analysis fees (section 7.2.1)

Inspection charges: *Council's charge out rate*

Laboratory Analyses: *Full cost of laboratory charges*

VI: Application fees (section 7.2.2)

Category 1	Permit	<i>No charge</i>
Category 2	Permit	<i>No charge</i>
Category 3	Agreement	\$

VII: Septic tank and other approved liquid waste (section 7.2.3)

Volume: \$ per kL[‡]

[‡] It may be appropriate to have different charges for different waste types.