CHARTERS TOWERS
REGIONAL COUNCIL

STRAT0071/CCS - Charters Towers Trade Waste Environmental Management Plan (TWEMP)

June 2020

Contents

1 TRADE WASTE PLAN AND MANAGEMENT FRAMEWORK

This Trade Waste Environmental Management Plan (TWEMP) sets out in detail how Charters Towers Regional Council (CTRC) manages trade waste discharges and meets its obligations under legislation and its relevant environmental authorities.

This TWEMP aims to standardise trade waste management practices across CTRC's service area. Notwithstanding the general alignment of trade waste management practices, this TWEMP applies certain local provisions where these are desirable to ensure CTRC can achieve its trade waste objectives.

The TWEMP is supported by CTRC's website, which provides concise descriptions of trade waste responsibilities and access to guidelines and forms relevant to the management of trade waste (refer to www.charterstowers.qld.gov.au).

1.1 Charters Towers Regional Council

CTRC was formed in March 2008 through the amalgamation of two former Councils: the Charters Towers City Council and the Dalrymple Shire Council. Council's role is to provide facilities throughout the Region in an effective and efficient manner and encourage strategic and sustainable development of the area for the benefit of all citizens. CTRC strives to give exceptional service for exceptional people.

CTRC is deemed to be a service provider for water and wastewater services under the *Water Supply (Safety and Reliability) Act 2008* (the *WS Act*).

CTRC's water and wastewater services are provided to customers in Charters Towers and Greenvale. As part of its wastewater services, CTRC manages the discharge of trade waste to its sewerage networks.

1.2 Introduction

Trade waste is defined under the *WS Act* as 'water-borne waste from business, trade or manufacturing premises, other than waste that is a prohibited substance, human waste or stormwater'.[1]

Liquid wastes are produced by a variety of industrial, commercial and domestic activities. The *Environmental Protection Act 1994* (the *EP Act*) 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.

The discharge options for producers of trade waste are:

- Obtain an environmental authority under the *EP Act* to treat the waste themselves before discharge to the environment
- To have it treated at an approved treatment facility, or
- Seek approval from a service provider such as CTRC to discharge to the sewerage system.

The discharge of trade waste to stormwater drainage is prohibited under the *EP Act* and the *Local Government Act 2009 (the LG Act).*

CTRC provides a sewerage system primarily for the transport and treatment of domestic sewage. Payment for this service is collected through sewerage charges on each sewered property. The sewerage system may also be used, with the approval of CTRC, for the acceptance and treatment of trade waste, though there is no obligation for a sewerage service provider to accept trade waste. Trade waste charges apply to recover costs because trade waste imposes an additional load on the sewerage system.

[1] *Water Supply Act (Safety and Reliability) Act 2008*, Schedule 3

Trade waste may have an organic strength many times that of domestic sewage and may also contain other substances that are unusual in domestic sewage, such as high levels of fats and grease, heavy metals and organic chemicals that CTRC's sewerage infrastructure is not designed to treat. These substances may:

- Pose a risk to the safety and health of sewerage workers
- Cause physical damage to sewerage infrastructure
- Inhibit biological processes at treatment plants
- Accumulate in biosolids, making their reuse difficult or impracticable, or
- Pass through the plant untreated resulting in environmental contamination or an inability to reuse water.

1.3 Purpose

This TWEMP sets out in detail how CTRC manages trade waste discharges and meets its obligations under legislation and its relevant environmental authorities. The purpose of the TWEMP is to streamline trade waste management practices across the Region.

1.4 Trade Waste Environmental Management Plan

The aim of the TWEMP is to ensure the continued protection of the environment and waterways by conditionally accepting trade waste into sewerage infrastructure provided that:

- It does not contain substances in amounts that are or may be toxic or hazardous to the Charters Towers Regional Council's sewerage infrastructure, treatment processes, personnel or the environment
- Where necessary, trade waste has been pre-treated by on-site 'best practicable treatment' to ensure sewer acceptance criteria are not exceeded, and
- The system is of adequate capacity to effectively collect, transport and treat trade waste.

CTRC is committed to improving the efficiency with which assets and resources are used and to minimise the impact of waste on the community and the environment. To achieve these principles in the management of trade waste, CTRC will focus on the following trade waste management initiatives:

- Development and implementation of a compliant TWEMP
- Clear communication of CTRC's Trade Waste Management System (and its requirements) to trade waste customers and applicants
- Application of risk-based trade waste management activities, including development and implementation of a consistent and equitable basis for scheduling compliance activities
- Conservation of resources and protection of the environment through waste minimisation, recycling, reuse and treatment at source
- Adoption of National and State guidelines applicable to the management of trade waste (specifically including the Australian Sewage Quality Management Guideline (2012)), and
- Development of pricing and charging policies to reflect user pays principles and progressing towards recovering the full cost of trade waste services.

1.5 Trade Waste Objectives

CTRC's trade waste objectives are:

- To protect the safety of Charters Towers Regional Council's personnel and the public, particularly:
  - Wastewater system personnel who may be affected by trade waste substances in the wastewater or more generally the overall wastewater quality in the course of their work, and
  - The general public from the impacts of wastewater system operation (e.g. from unacceptable odour emissions) by conforming to strict health and environmental standards.
- To protect sewerage infrastructure, ensuring that:
  - The structural or hydraulic integrity of wastewater system infrastructure will not be adversely impacted (e.g. through unacceptable corrosion) or will not result in an unacceptable level of risk
  - The achievement of regulated or reasonable business service objectives for the wastewater system are not compromised
  - The operation of the wastewater system is not unreasonably compromised or interfered with, and
  - More generally, the intended lives of all components of wastewater system infrastructure are not unreasonably downgraded.
- To protect treatment processes, ensuring that:

    - Treatment plant processes are protected so that the ability of the treatment plant processes (biological and physicochemical) to efficiently treat the wastewater streams and produce treated wastewater or biosolids acceptable for disposal or reuse is not adversely and unacceptably impacted.
- To ensure regulatory compliance by:
    - Protecting the capability to achieve regulatory compliance with reasonable certainty and within acceptable risk
    - The avoidance of operating and/or environmental authority breaches
    - Meeting requirements for the management of wastewater overflows to the environment, and
    - Meeting requirements for treated wastewater and biosolids disposal to the environment.
- Support recycling and biosolid reuse by:
    - Protecting the capability to recycle and reuse treated wastewater and biosolids in compliance with regional strategies without impracticable further treatment.

In addition to the key objectives set out above, CTRC seeks to:

- Protect receiving waters from substances toxic to human health and the environment
- Recover the cost of services including the cost of conveyance, treatment, disposal, maintenance and repair of damage to the sewerage system
- 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
- Encourage waste minimisation and cleaner production, including waste prevention, recycling and pretreatment, and
- Encourage generator awareness of regulated waste disposal requirements and relevant environmental and waste management issues.

1.6 Trade Waste Environmental Management Framework

This TWEMP provides the framework for managing trade waste across CTRC's service area and contains requirements for the discharge of trade waste into its sewerage infrastructure. It is consistent with CTRC's rights, powers, and obligations under Queensland legislation and conforms to the principles developed in National guidelines and standards such as the Agriculture and Resource Management Council of Australia and New Zealand (ARMCANZ) and Australian and New Zealand Environment and Conservation Council (ANZECC) and National Water Quality Management Strategy – Guidelines for Sewerage Systems 1994.

This TWEMP applies to all trade waste discharges to CTRC's sewerage infrastructure, whether directly or indirectly, and conditional Trade Waste Approvals issued by CTRC from time to time. It details monitoring, compliance and enforcement activities, establishes administrative review processes and describes CTRC's powers and obligations and the obligations of its customers. This TWEMP also details CTRC's trade waste fees and charges, which are levied on a user pays basis.

1.7 Trade Waste Legislation

Under the *WS Act*, CTRC may consent to the discharge of trade waste to the sewer. To the extent that CTRC permits the discharge of trade waste to sewer, its management of such discharges is regulated by legislation including the *WS Act* and the *EP Act*.

1.8 Australian Sewerage Quality Management Guidelines

The Water Services Association of Australia has developed the *Australian Sewage Quality Management Guideline (2012) (Australian Guideline)* to provide service providers with a strategic, process-driven approach to source management that compliments water industry practice. The *Australian Guideline* has a strong emphasis on trade waste management and was written for service providers, by representatives of Australia's major water authorities. It builds on the excellent work of ARMCANZ and ANZECC in their development of national acceptance criteria published as the *Guidelines for Sewerage Systems, Acceptance of Trade Waste (Industrial Wastes), ARMCANZ and ANZECC, November 1994.*

1.8.1 Conveyance, Treatment and Disposal of Trade Waste

CTRC processes Trade Waste Approval Applications for discharge of trade waste to its sewerage infrastructure. CTRC may issue a Trade Waste Approval to Applicants, including on a conditional basis, where hydraulic and

treatment capacity is available. The Trade Waste Approval will be subject to compliance with the conditions described within the Trade Waste Approval.

Applicants are encouraged to contact CTRC early in a project cycle to determine likely discharge conditions and disposal service availability:

- Prior to or at the time of development application — for new Approvals where there is a proposal to discharge trade waste with a Biochemical Oxygen Demand (BOD) load in excess of 2.0 kilograms per day or a trade waste flow in excess of 1.0 kilolitres per day or where contaminant concentrations may be greater than the relevant sewer acceptance criteria, and
- Prior to the Project Planning stage — for existing Approvals where existing Trade Waste Approval holders propose to increase the existing trade waste BOD load to more than either 2.0 kilograms per day or a trade waste flow in excess of 1.0 kilolitres per day or where contaminant concentrations may be greater than the relevant sewer acceptance criteria.

An Application for a Trade Waste Approval or any variations to an existing Trade Waste Approval must be completed in accordance with section 2 of this TWEMP.

CTRC may, at its sole discretion, approve special disposal arrangements in the following circumstances (see section 3.4.3):

- Road tankering by approved private sector transporters of non-regulated liquid wastes or readily biodegradable wastes for direct discharge to CTRC's sewerage treatment plant (STP), and
- Controlled discharge from Approval holders' premises of assessed 'one-off' waste batches that are not included as approved trade waste generating activities in the site Trade Waste Approval.

1.8.2 Trade Waste Advisory Services

As part of its commitment to minimising the volume and impact of trade waste, CTRC provides services to assist businesses to comply with their trade waste obligations:

- Council Officers are available by appointment to provide trade waste information and to assist traders with Trade Waste Approval Applications
- Council Officers can, on request, make site visits and provide advice of a general nature about trade waste procedures, including pretreatment requirements and monitoring requirements
- Methods of containing costs by adopting cleaner production or waste minimisation strategies can be discussed with Council Officers, although specialist advice should always be sought to address specific site requirements, and
- Heavy industries with complex production problems are likely to need to employ consultants to develop waste minimisation plans and to resolve specific waste pretreatment problems.

2 TRADE WASTE APPROVAL

This section describes what is expected of Trade Waste Approval holders and Occupiers of nominated premises before their Trade Waste Approval Application can be accepted by CTRC. CTRC applies an Owner-based system of trade waste management (meaning the responsibility for compliance with Trade Waste Approval conditions and this TWEMP resides with the property Owner). However, many issues that arise can be resolved through negotiation between CTRC and the property Owner/property Occupier/property Owner's authorised representative.

Important Note
The discharge of trade waste is subject to CTRC's Trade Waste Approval conditions and this TWEMP. It is the sole responsibility of Approval holders to ensure compliance with the Trade Waste Approval Conditions and this TWEMP.

2.1 Application for a Trade Waste Approval

The Owner of the infrastructure (the Applicant) from which trade waste will be discharged into CTRC's sewerage system must make written application for approval to discharge trade waste. In most cases the Applicant will be the Owner of the land or the Owner's managing agent, acting on behalf of the landowner.

In the case of Community Title Scheme (CTS) land or strata title land, the Owner of each lot within the CTS in which trade waste is generated and discharged to sewer must apply individually for a Trade Waste Approval.

Applications must be made using the approved Council form. Application forms are available via the CTRC Administration Centre located at 12 Mosman Street, CHARTERS TOWERS QLD 4820, downloaded from CTRC's website (www.charterstowers.qld.gov.au) or by calling Council's Plumbing and Trade Waste Inspector on 4761 5300. Figure 1 provides an overview of the Application process and its relationship to Plumbing Permit Work.

Applications (for new Approvals or amendments to existing Approvals) must be lodged prior to commencement of trading or discharge under the changed conditions. The property Owner of the premises is required to lodge an Application for Trade Waste Approval under the following circumstances (where trade waste drainage is included):

- Where trade waste is being generated at a premise and no Trade Waste Approval has been issued
- During the processing of a Development Application for new or extended industrial/commercial premises
- Prior to a Plumbing Work Permit being issued for a new development (by CTRC) permitting regulated Plumbing work to commence
- On change of property and or land ownership, and
- On change of land title to a CTS or strata title.

The property owner is required to lodge an Application to Amend Trade Waste Approval under the following circumstances (where a Trade Waste Approval already exists):

- After shop fit-outs and refurbishments that require Plumbing approval, and
- Where a change in process occurs that materially affects the trade waste volume or quality.

Failure to provide all required information in an Application may result in delays in issuing approvals.

Where a waste is deemed unsuitable for disposal to sewer, a Trade Waste Approval will not be issued and alternative arrangements for disposal will have to be made by the Applicant. General information on treatment and disposal options for unsuitable waste may be obtained from the Department of Environment and Science (DES).

2.2 Requests for Compliance Assessment of Hydraulic Plans

CTRC permits the assessment of Hydraulic Plans incorporating trade waste drainage. To ensure that Plumbing Permit Work is consistent with the requirements of this TWEMP and the subsequent Trade Waste Approval.

If any new Plumbing Permit Work (including new trade waste drainage or pretreatment infrastructure) is proposed for a premises, the property owner (or the owner's agent) must submit a request to CTRC for assessment of the plan, along with copies of the plan prior to the commencement of any works.

The Council will assess the request and determine whether a Plumbing Work Permit can be issued. While a Plumbing Work Permit is a prerequisite of a Trade Waste Approval, it does not in itself provide approval to discharge trade waste to sewer. It is necessary to apply separately to CTRC for a Trade Waste Approval.

Where a plan does not comply with the conditions of the blanket approval arrangements, it must be referred to CTRC for further consideration. Information is provided in the following section.

2.3 Trade Waste Consent

After the Applicant's Hydraulic Plan has been received by CTRC, assessment steps proceed according to the complexity of the proposed system, as follows:

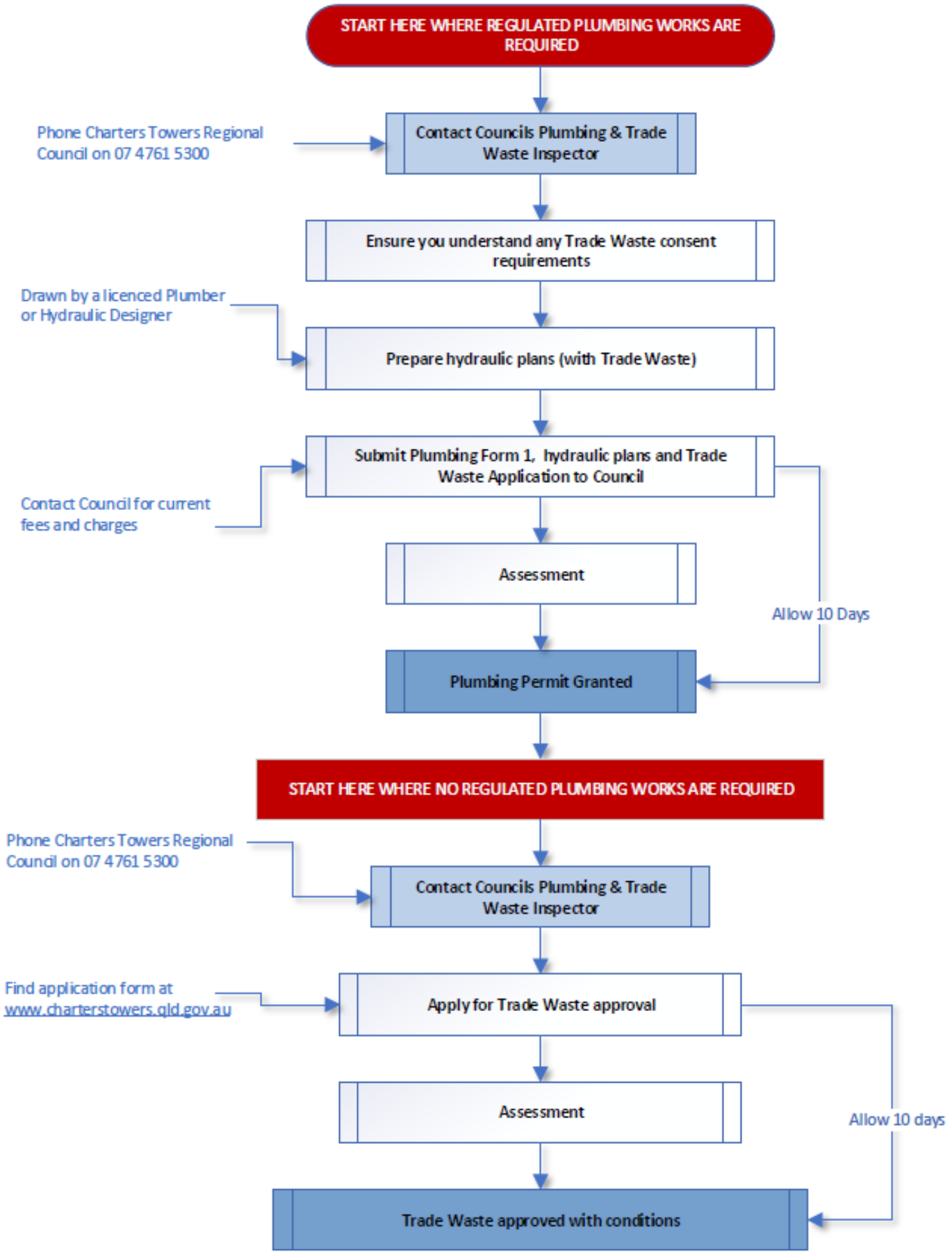
- **BASIC - No trade waste consent required** - where an Applicant's Hydraulic Plan relates to a business type where no pretreatment or basic pretreatment applies (i.e. business type is listed in Appendix A3.1), Council Officers assess the plan's compliance with trade waste conditions. If the plan is compliant, Council Officers can provide a Plumbing Work Permit. Any non-compliance can be addressed via a Request for Information (RFI) from Council to the Applicant.
- **COMPLEX – Trade waste consent required** - where an Applicant's Hydraulic Plan:
    - Is for a business type requiring complex pretreatment infrastructure (i.e. business type is not listed in Appendix A3.1), or
    - Seeks relaxation of trade waste conditions (such as sizing of pretreatment devices or roofing requirements), or
    - Seeks to employ a diversion valve, first flush device, food waste disposal unit or there is another complicating factor identified.

The Applicant must obtain a Trade Waste Consent from CTRC to support the Application. The Trade Waste Consent must be provided to Council before a Plumbing Work Permit can be issued. If not initially supplied with the Hydraulic Plan, Council's Plumbing and Trade Waste Inspector will issue a Not Properly Made Application Request for Information to the Applicant.

To obtain a Trade Waste Consent, the Applicant is required to apply in writing to CTRC on the form provided for this purpose (available at www.charterstowers.qld.gov.au). The Applicant must provide satisfactory justification for the design and may be required to provide a report or other supporting evidence supplied by a qualified Hydraulic Consultant. For the purposes of this document, a qualified Hydraulic Consultant means a Hydraulic Consultant who is a member of the Association of Hydraulic Services Consultants Australia (AHSCA) or such other persons as CTRC may reasonably determine to be qualified.

Guideline
If your Application is complex or you are seeking a relaxation of standard trade waste conditions described in this TWEMP, you should provide the relevant CTRC Trade Waste Consent to Council with your Hydraulic Plans. This will expediate the Plumbing assessment process by avoiding need for a "request for information" during the assessment.

Figure 1 Overview of Application Process (with and without regulated Plumbing works)



2.4 Requirements for Plans with Trade Waste Drainage

Hydraulic Plans incorporating trade waste drainage should be prepared in accordance with Part 8 (Compliance Assessment) of the *Plumbing and Drainage Regulation 2019* and must include:

- A description of the Applicant's business type in accordance with CTRC's nomenclature (refer to Appendix A3.1)
- Details of each trade waste generating area, including:
  - A description of trade waste generating activities linked to each trade waste generating area
  - The designed peak trade waste flow rate (litres per hour)
  - For external areas, if no bunding or wall is incorporated, the grade and fall of the trade waste generating area floor and surrounds, and
  - For internal areas, the grade and fall of the trade waste generating area floor.
- Roofing and sheeting details for external trade waste generating areas, including:
  - A diagram of the roof and overhang of external trade waste generating areas showing the minimum length of overhang on open walls to be at least 25% of the height of the roof from the finished ground level
  - Where the design relies in part on wall sheeting, details of the coping or flashing that prevent rainwater entering the prescribed area, and
  - If roofing is not feasible, details of diversion valves or first flush systems (these require trade waste consent from CTRC).
- Details of relevant water or trade waste effluent meters, including:
  - The existence and location of any relevant potable water sub-meters
  - The existence and location of any trade waste effluent meter/s
  - The existence and location of any alternative water supply meter/s where such water is used to generate trade waste, and
  - The location of meters and meter displays in accordance with the requirements described in B1.2 of the Queensland Plumbing and Wastewater Code.
- Details of all pretreatment systems, including:
  - The manufacturer's name
  - The pretreatment system capacity as specified by the manufacturer and the expected hydraulic load on the pretreatment system
  - Where wastewater is to be pumped, the type and rating of the pump (which must be matched to the manufacturer's specifications for the pretreatment system)
  - Where oily water is to be pumped, a statement that the pump will be of a non-emulsifying type
  - A hose tap (20mm minimum), with compliant Backflow Protection, located within 5 metres of each pretreatment device
  - A statement that the pretreatment system is accessible for maintenance (for guidance, it is recommended that the hardstand area be no further than 15 metres from the pretreatment device), and
  - An indication that the cover/lid of the pretreatment system is of an airtight type (as specified by AS 3996:2006).
- Details of hydraulic load allocated to pretreatment equipment, including:
  - For transparency about how trade waste hydraulic loads have been allocated to pretreatment devices, an information schedule of the form shown in Table 1. Schedules with different formatting or justification for the adopted hydraulic load are acceptable, subject to the Applicant's representative declaring responsibility for the estimates using the attestation block shown below in Table 1
  - Where there is more than one arrestor on the premises, the identification numbers of each of them
  - If more than one tenancy on the premises, details of the arrestor that will service each tenancy
  - Details of the total peak hourly flow directed to each arrestor
  - Where a connection, disconnection or change to connection effects an existing trade waste installation, updated details of new hydraulic loadings, and
  - Where new shop fit-out is to be installed at premises, resulting in multiple tenancies connected to a shared arrestor, details of estimated peak trade waste flow for all shops connected to the shared arrestor.

Table 1 Example of Information Schedule

Arrestor No.	Tenancy	Business Type*	Fixtures	Qty	Peak Hourly Trade Waste Flow (L/hr)†	Arrestor Capacity (L)
BW2635	1	Takeaway	Floor waste	1	50	
			Hand basin	1	30	
			Double bowl sink	2	600	
	2 (new)	Takeaway	Floor waste	1	50	
			Hand basin	1	30	
			Dishwasher	1	300	
			Total		1060	2000
New	3 (new)	Canteen	Floor waste	2	50	
			Hand basin	1	30	
			Total		80	1000

Notes describing this example:

Tenancy 1 – Existing tenancy with 2000L arrestor

Tenancy 2 – Shares arrestor BW2635. Existing arrestor is of adequate capacity

Tenancy 3 – Pre-treatment complies with minimum 1000L arrestor capacity

*For business types, see Appendix A3-1 of this document

†Guideline allocations for fixture peak hourly flows are provided within Appendix 4

Example Attestation Block for Hydraulic Plans with Non-Standard Trade Waste Flow Estimates

[Name of Hydraulic Consultant] representing *[Name of Applicant]* (e.g. CDE Property Group) attests that the estimated peak trade waste flows referred to on this plan are correct and that the proposed trade waste pretreatment solution meets the requirements of Charters Towers Regional Council's Trade Waste Environmental Management Plan.

Signed:[*signature of consultant's authorised representative*]

Dated: [date]

Applicants should consult with technical advisory services (e.g. hydraulic, chemical treatment and engineering consultants) to assist in the design and sizing of trade waste pretreatment infrastructure prior to the drafting of the plan. For processing and manufacturing industries, a pre-assessment meeting should be conducted with CTRC to determine trade waste effluent quality criteria so that adequate design and sizing of on-site trade waste infrastructure occurs.

2.5 Trade Waste Approval Duration and Renewal

Trade Waste Approvals are assessed, issued subject to conditions and/or renewed at CTRC's sole discretion. A Trade Waste Approval does not entitle an Approval holder to a renewal of the Approval. Trade Waste Approvals will be issued for a specified time period, not to exceed five (5) years, based on the Approval holder's trade waste risk class as assessed by CTRC. CTRC may at its discretion issue Trade Waste Approvals for a lesser period. Existing Trade Waste Approvals with longer approval durations will be maintained until the designated expiry date (even if this exceeds five (5) years from the effective date of this TWEMP).

Approval holders will be billed an annual discharge fee on 1 July each calendar year appropriate to the discharge category as per the Approval.

Revised Trade Waste Approval Conditions may apply from the time of renewal or following a Trade Waste Audit.

A Trade Waste Approval is only valid until the cessation of operations on the nominated premises. All previous Trade Waste Approvals issued for the nominated premises will expire upon the issue of a new Trade Waste Approval for the nominated premises.

Each Trade Waste Approval will indicate a specific date upon which it will expire. CTRC's Plumbing and Trade Waste Inspector will usually conduct an inspection of the premises (including any tenancies) within three (3) months of the expiry date.

If only minor changes need to be made to the Trade Waste Approval documentation, CTRC will renew the Trade Waste Approval and mail it to the Approval Holder. Trade waste charges will continue to be applied. Amendments can be made to renewed Trade Waste Approvals by completing the approved form and lodging it with CTRC.

2.6 Advising of Events and Particulars

Approval holders must promptly advise CTRC of the following:

- Name, address and contact details of any Occupier and the nature of the Occupier's trade or business on the nominated premises (including any changes to these details)
- Any significant changes to the composition of approved trade waste prior to discharging such trade waste into CTRC's sewerage infrastructure
- Any alteration or addition to the trade waste generating processes or the quantity and quality of trade waste discharged
- New trade waste generating activities on the nominated premises, and
- Any misrepresentation or mistake in or omission of relevant facts from their Trade Waste Approval Applications.

Advice regarding the above events and particulars can be obtained in person by visiting CTRC Administration Centre located at 12 Mosman Street, CHARTERS TOWERS QLD 4820 or by calling Council's Plumbing and Trade Waste Inspector on 4761 5300.

2.7 Voluntary Cancellation of Trade Waste Approvals

Where an approval holder wishes to cancel a Trade Waste Approval, a request must be completed in writing and lodged with CTRC. The request requires the approval holder to provide:

- The proposed cancellation date
- The general reason for the cancellation
- Nomination of a contact person for Council's Plumbing and Trade Waste Inspector to arrange a final inspection prior to cancellation (if required)
- Provide evidence of final pump out and servicing of any pretreatment infrastructure
- Details about the future use of the site (if known)
- A forwarding address for payment of final charges, and
- A written declaration that all drainage (including pretreatment devices) no longer in use will be serviced, cleaned and sealed in accordance with *Plumbing and Drainage Regulation 2019*.

Trade waste charges will cease to apply from the day on which CTRC gives express notice to the approval holder of the cessation of discharge by the approval holder. Upon cessation of discharge, the approval holder must ensure that any pretreatment infrastructure is serviced, cleaned and sealed as soon as reasonably practicable after the last day of trade waste generation on the premises. To ensure plumbing and drainage compliance, the approval holder should advise CTRC of the cessation of trade waste activities at the site.

2.8 Suspension or Cancellation by Charters Towers Regional Council

CTRC may also suspend or cancel a Trade Waste Approval under sections 182 – 184 of the *WS Act* (see section 7.8 of this TWEMP). Trade waste charges will cease to apply as set out in section 7.8 of this TWEMP.

2.9 No Transfer of Trade Waste Approvals

Trade Waste Approvals are not transferable. Approval holders must not transfer a Trade Waste Approval to another person.

2.10 Acceptance of Trade Waste from other Distributor-Retailers

CTRC may by agreement with another distributor-retailer, accept sewerage to which trade waste has been discharged from the latter's service area. CTRC's agreement may be conditional.

3 GENERAL REQUIREMENTS AND GUIDELINES

Under a Trade Waste Approval given by CTRC, approval holders may discharge or authorise the occupiers of nominated premises or tenancies to discharge trade waste into CTRC's sewerage infrastructure in accordance with the Trade Waste Approval. Approval holders must ensure they comply with the requirements of this TWEMP and their Trade Waste Approval, including:

- No prohibited substances are to be discharged into Charters Towers Regional Council's infrastructure
- Discharge of trade waste must accord with the Trade Waste Sewer Acceptance Criteria unless specifically varied by the Trade Waste Approval
- The provision of appropriate pretreatment infrastructure
- Effective operation and maintenance of pretreatment infrastructure for nominated premises – including meeting the manufacturer's recommendations and the specific conditions of the Trade Waste Approval
- Proper disposal of specific waste (specifically including regulated and residual wastes)
- Safe access is given to Charters Towers Regional Council's Officers to carry out an inspection of nominated premises or tenancies
- No interference with monitoring equipment
- The keeping and provision of records
- The development and implementation of management plans and preparation of monitoring reports
- Prohibition of transfer of Trade Waste Approvals
- Payment of charges and fines
- Indemnification is given to Charters Towers Regional Council
- Notifying CTRC of specific events and particulars, and
- Compliance with specific requirements after cessation of trade waste discharge.

3.1 Ensuring Compliance with TWEMP and Trade Waste Approval

Trade waste discharged under a Trade Waste Approval must comply with every condition of the Trade Waste Approval, and to the extent that they are not specifically altered by Trade Waste Approval conditions, every provision of this TWEMP.

Approval holders must make all parties involved in trade waste activities aware of their obligations under the relevant Trade Waste Approval and this TWEMP prior to the discharge of trade waste by an occupier.

Approval holders, issued a Trade Waste Approval after the effective date of this TWEMP, are required to ensure compliance with Trade Waste Approval conditions within ninety (90) days after the date of issue of the Trade Waste Approval, unless otherwise stated within the Trade Waste Approval (usually by reference to an agreed compliance schedule).

Guideline	
A Trade Waste Approval is the written approval from CTRC that states the requirements and conditions under which discharge to the sewer is allowed. Trade Waste Approvals will be issued with standard and specific conditions that cover the following aspects:	
• *Duration of the approval* • *Trade waste flow volume* • *Trade waste flow rate* • *Trade waste quality* • *Discharge times* • *Trade waste pretreatment infrastructure and maintenance*	• *Monitoring requirements* • *Other site-specific requirements* • *Trade waste charges* • *Trade waste customer categories, and* • *Water meters or effluent flow-meters used for trade waste charging purposes.*

3.2 Trade Waste Sewer Acceptance Criteria

Trade waste sewer acceptance criteria are a suite of standards established to protect CTRC's sewerage infrastructure against damage, pass through and interference. These criteria describe the maximum level of contaminants (concentration and/or mass based) allowable in a trade waste to be suitable for discharge to CTRC's sewerage system. No person shall discharge trade waste into CTRC's sewerage infrastructure containing contaminants in excess of the trade waste sewer acceptance criteria (for any contaminant listed in Appendix 2); unless otherwise approved as a specific Trade Waste Approval condition.

Sewer acceptance criteria are dependent on the characteristics of sewerage systems and may be varied from catchment to catchment.

All concentration limits described within sewer acceptance criteria are for total contaminant concentrations (i.e. not soluble or dissolved contaminants) unless indicated otherwise.

Any substance not listed in the sewer acceptance criteria is a restricted discharge where it meets the definition in Appendix A2.3 and must not be discharged at measurable concentrations unless specifically approved by CTRC. CTRC may request demonstrable evidence of biodegradability and toxicity for any substance when assessing suitability for sewer acceptance.

3.2.1 Use of Trade Waste Improvement Plan (TWIP)

CTRC may at its sole discretion require a Trade Waste Approval holder (of any category) to develop and implement a Trade Waste Improvement Plan (TWIP) in relation to any non-compliant discharge within three (3) months of being notified of the requirement.

The TWIP must review the adequacy of any existing pretreatment infrastructure to treat trade waste effluent to meet the trade waste sewer acceptance criteria now and in the future. The TWIP must:

- Provide recent effluent quantity and quality
- Include an investigation of the options for improving discharge quality (to meet the trade waste sewer acceptance criteria or reach a level that is as low as practicably possible)
- Recommend the type of pretreatment needed (to meet the trade waste sewer acceptance criteria or reach a level that is as low as practicably possible)
- Provide an action plan of duration not greater than two (2) years, describing activities and timelines toward achievement of the sewer acceptance criteria (or to a level that is as low as reasonably practicable)
- Include a demonstration of immediate improvement in trade waste quality
- Include provision for regular monitoring and reporting of discharge quantity and quality, and
- Be completed or endorsed by a suitably qualified person (e.g. consulting process/environmental engineer).

CTRC at its sole discretion, may negotiate implementation of TWIP proposals with approval holders on a site by site basis taking into account matters including, without limitation, economic conditions, site constraints and CTRC's trade waste objectives.

CTRC will respond to approval holder's TWIP submissions within twenty (20) days of receipt. CTRC at its sole discretion may accept, accept subject to conditions or not accept the report. Where the report is accepted, the agreed sewer acceptance criteria will be included in the approval holder's Trade Waste Approval conditions for the period of the TWIP.

Where the TWIP is not accepted, CTRC will advise the approval holder of the reasons and may seek further information or representations from the approval Holder. The approval holder will have twenty (20) days in which to respond to any further information requests and/or to provide additional representations supporting the TWIP. If the approval holder does not respond within the twenty (20) day period, CTRC may at its sole discretion, correct any non-compliances in the TWIP and the approval holder must thereafter comply with the TWIP as amended.

Failure to comply with an amended TWIP may result in CTRC commencing compliance action which could result in suspension or cancellation of a Trade Waste Approval.

A template TWIP can be obtained in person by visiting CTRC Administration Centre located at 12 Mosman Street, CHARTERS TOWERS QLD 4820 or downloaded from CTRC's website (www.charterstowers.qld.gov.au).

Guideline
The trade waste sewer acceptance criteria apply at the point at which trade waste is discharged into Charters Towers Regional Council's sewerage infrastructure only if the trade waste has not been intermingled with domestic sewage or diluted by another means. CTRC may elect to have trade waste sewer acceptance criteria apply at the sewer discharge point from trade waste pretreatment equipment and/or prior to mixing with dilution flows from domestic sources. *Trade waste discharged from the following industry types that is pretreated using properly maintained, fit for purpose, basic trade waste pretreatment infrastructure (e.g. silt/grease/fat/oil/hydrocarbon - water separation*

systems) is usually deemed to comply with the trade waste sewer acceptance criteria, excluding prohibited or restricted contaminants (for detail see Appendix A3.1):	
• *Automotive and mechanical workshops* • *Mining service industry* • *Foodservice and hospitality industries* • *Minor food manufacturing* • *Education* • *Health services*	• *Beauticians and hairdressers* • *Care facilities* • *Veterinary* • *Air conditioning and cooling towers, and* • *Selected commercial processes.*

3.3 No Discharge of Prohibited or Restricted Substances to Sewer

3.3.1 Prohibited Substances and Prohibitions

No person, whether the person is an approval holder or not, shall discharge or cause to be discharged into CTRC's sewerage infrastructure prohibited substances listed in the trade waste sewer acceptance criteria (Appendix A2).

Prohibited substances are detailed in Schedule 1 of the *WS Act*, and include:

- A solid or viscous substance in a quantity, or of a size, that can obstruct sewerage, or interfere with the operation of sewerage
- A flammable or explosive solid, liquid or gaseous substance, including petrol
- Floodwater, rainwater, roof water, stormwater, subsoil water and surface water
- A substance, that given its quantity, is capable alone, or by interaction by another substance discharged into sewerage, of:
    - Inhibiting or interfering with a sewerage treatment process, or
    - Causing damage or a hazard to sewerage, or
    - Causing a hazard for humans or animals, or
    - Creating a public nuisance, or
    - Creating a hazard in waters into which it is discharged, or
    - Contaminating the environment in places where effluent or sludge from a sewage treatment plant is discharged or reused.
- A substance at a temperature of more than 380°C.

For greater detail about specific prohibited substances refer to the listings within Appendix A2 – A2.2 Prohibited Substances.

Additionally, in relation to CTRC's sewerage infrastructure, the following activities are prohibited:

- Direct connection of chemical storage areas, such as dangerous goods stores, flammable goods stores, petroleum dispensing areas and non-roofed open bunded areas into a property sewer or CTRC's sewerage infrastructure (i.e. any leaks or spillage or overflows cannot be drained by gravity or any automated means to the sewerage system), and
- Direct or indirect connection of petroleum dispensing areas or flammable goods stores into a property sewer or CTRC's sewerage infrastructure.

3.3.2 Dilution Prohibition

Dilution of trade waste discharge, as a partial or complete substitute for adequate pretreatment to achieve compliance with sewer acceptance criteria, is prohibited unless the dilution is expressly authorised as a condition of a Trade Waste Approval.

Guideline
CTRC may impose mass limitations if dilution is being used to comply with applicable trade waste sewer acceptance criteria.

3.3.3 Regulated and Residual Wastes Prohibition

The discharge of unprocessed regulated waste and residual waste into CTRC's sewerage infrastructure is prohibited. Such waste must be removed from the site and disposed of in accordance with the requirements of the *EP Act* and its subordinate legislation.

3.3.4 Storm Water Prohibition and Roofing Requirements

The discharge of uncontaminated stormwater/surface water and roof run-off into CTRC's sewerage infrastructure is prohibited. Sewered trade waste generating areas in industrial or commercial premises that are subject to stormwater entry must be roofed and bunded.

The roof must have sufficient overhang (outwards from the vertical above either a bund wall or the ground contour grading apex) to prevent air-borne wind/rain stormwater incursion into the trade waste generation area. The minimum roof overhang required is a length equal to 25% of the height of the roof from the finished ground level. Where bunded or partially sheeted above ground level, the roof overhang required is a length equal to 25% of the height of the open wall space.

The inflow and infiltration of stormwater into CTRC's sewerage infrastructure causes significant operational, public health risk problems and cost to the community. Due to the potential for environmental harm, property damage and public health risks from sewerage surcharge and raw sewage overflows during and after wet weather events, unroofed trade waste generating areas will not be approved for connection to CTRC's sewerage infrastructure unless there are extenuating circumstances (as detailed in section 4.4.1)

Guideline
Where roofing the trade waste generating area would cause non-compliance with legislation, regulation, condition or there are other extenuating circumstances that prevent the area from being roofed, CTRC may consent to drain the area to sewer through an appropriate trade waste diversion and pretreatment system. See section 4.4.1 for more information.

3.3.5 Restricted Substances

No person, whether the person is an approval holder or not, shall discharge or cause to be discharged into CTRC's sewer any restricted substance at concentration or mass load greater than the relevant sewer acceptance criteria listed within Appendices A2.3 to A2.6.

3.3.6 Health Care Industry Waste Restriction

3.3.6.1 Solid Wastes

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 anatomy, must not be discharged into the sewer.

3.3.6.2 Clinical Wastes

Clinical wastes such as:

- Laboratory and associated wastes involved in specimen processing
- Human tissues, including materials or solutions that contain free-flowing or expressible blood, and
- Infectious or other liquid wastes that have the potential to cause public offence must not be discharged into the sewer without approval. Refer to Appendix A2.3.

Aqueous pathological wastes must be stored, handled and disposed of according to any relevant guidelines adopted by the National Health and Medical Research Council and Queensland Health.

Guideline
Clinical waste that has undergone pretreatment to render it non-infectious/non-hazardous or has been risk assessed and approved in writing by both Queensland Health and CTRC as safe for sewer disposal may be approved for discharge and trade waste charges will apply. Approval holders must comply with Queensland waste disposal regulations applicable to clinical waste, including the Environmental Protection Regulation 2019.

3.3.6.3 Chemical Wastes (including Mercury)

Mercury is widely used in the preparation of restorative teeth amalgams. Dental amalgam waste contains mercury and, although designated as clinical waste, must not be discharged into CTRC's sewerage infrastructure.

Guideline
The Trade Waste Acceptance Standard for mercury is very low. Therefore, in general terms, mercury and anything containing mercury should not be discharged into Charters Towers Regional Council's sewerage

infrastructure. Approval holders must comply with Queensland waste disposal regulations applicable to mercury and anything containing mercury, including the Environmental Protection Regulation 2019.

In accordance with ISO 11143:2008 Dentistry – Amalgam Separators, dental practitioners should install amalgam separators to remove mercury from trade waste streams containing amalgam residues. This includes cuspidor waste collected from dental chairs.

3.4 Ensuring Proper Disposal of Specific Waste

3.4.1 Disposal of Residual and Regulated Wastes

Residual and regulated wastes include:

- Residual wastes from basic pretreatment infrastructure such as grease, cooking oils, mineral oils, fat and sediments
- Chemical treatment plant residual waste (e.g. heavy metals sludges), and
- Other industrial processing wastes (including regulated wastes) whose contamination levels exceed the trade waste sewer acceptance criteria.

The transportation and disposal of unsuitable industrial waste is undertaken by private industry subject to environmental approvals granted by the Department of Environment and Science (DES) under the *EP Act*. CTRC may, at its sole discretion, accept particular biodegradable wastes for treatment and disposal at its STP subject to sections 3.4.2 and 3.4.3. CTRC does not issue a single "preferred supplier" contract for collection of these waste types. Several experienced private operators are available to safely collect both solid and liquid hazardous industrial waste for disposal.

Information about waste collection services that CTRC may accept is available by calling Council's Plumbing and Trade Waste Inspector on (07) 4761 5300.

Private consultants should be used to provide additional waste management services including waste auditing and waste minimisation. Professional services are commercially available for identification, segregation and approved packaging of complex mixtures and waste loads with numerous containers of industrial, laboratory wastes or unwanted chemicals.

3.4.2 Disposal of Septic Tank Wastes and Sullage

Septic tank waste and sullage from residential households is domestic sewage and cannot be discharged to CTRC's sewerage infrastructure under a Trade Waste Approval.

Tanker loads of liquid domestic sewage, septic and holding tank waste, collected by licensed transporters, may be discharged into CTRC's sewerage infrastructure only at designated Waste Receival Points (WRPs) at such times as are established by Charters Towers Regional Council. Tank collected liquid waste discharges to specific CTRC WRPs may be suspended and redirected to alternative WRPs at the sole discretion of CTRC. All bio-solids including sludge and sullage resulting from tank collected waste must be disposed of at CTRC's sewerage treatment plant.

CTRC does not allow the discharge of collected sewerage, septic and holding tank waste as well as bio-solids, sludge and sullage into sewerage infrastructure, without prior approval. CTRC may collect samples from each load of waste to ensure compliance with applicable disposal conditions and may require the entity that transports and discharges the waste to provide a waste analysis of any load prior to discharge.

Sewage, septic and holding tank wastes will only be accepted for disposal if accompanied by a waste transport docket that demonstrates compliance with the DES waste tracking requirements, if an unauthorised discharge is found the company responsible for the discharge may be suspended from discharging future wastes into CTRC's sewerage infrastructure.

Only sewage, septic and holding tank waste collected within CTRC's service area can be discharged into CTRC's sewerage infrastructure, unless specifically authorised by CTRC.

Fees for collected waste discharge (i.e. administration and quality and/or volume fees) are published in the annual (financial year) CTRC Annual Fees and Charges as amended.

Approval holders must comply with Queensland waste disposal regulations applicable to septic tank waste, sullage and holding tank waste, including the *Environmental Protection Regulation 2019.*

3.4.3 Special Disposal of Trade Waste to Sewer

Persons can apply to CTRC for a special disposal Trade Waste Approval to discharge one-off or unusual trade wastes into CTRC's sewerage infrastructure. Such wastes may include:

- Chemical toilet waste
- Off-specification food products, and
- Infiltration at contaminated site excavations.

The following wastes will not be accepted for disposal under this system:

- Domestic septic tank waste, and
- Non-biodegradable regulated wastes (as determined under the *EP Act*).

Approved trade wastes may be introduced into CTRC's sewerage infrastructure from designated land or at a designated receiving structure within the STP or at a site authorised by CTRC. Trade waste receivals will be accepted at times established by CTRC (and described within the issued Special Disposal Trade Waste Approval).

Temporary drainage and connection to CTRC's sewerage infrastructure intended to convey an approved special disposal waste must be approved by the relevant environmental regulator and CTRC.

CTRC may collect samples of approved special disposal wastes to ensure compliance with trade waste sewage acceptance criteria and special disposal Trade Waste Approval conditions and for billing purposes. CTRC may require the person requesting to discharge the waste to provide a waste analysis of any load prior to discharge.

Approved special disposal wastes will only be accepted for disposal at a CTRC site from a road tanker if the waste transporter is able to demonstrate compliance with the DES regulated waste tracking system (e.g. by provision of a properly completed waste tracking docket). Any discharge of collected waste at a CTRC site without an associated fully completed form or manifest is an unauthorised discharge and the approval holder responsible for the discharge may be suspended from discharging wastes into CTRC's sewerage infrastructure.

A basic sewerage access fee and quality/volume fees (if applicable) will be levied for these services either as agreed by negotiation or as published by CTRC.

Special disposal Trade Waste Approval can only be provided by CTRC. Forms can be obtained in person by visiting CTRC Administration Centre located at 12 Mosman Street, CHARTERS TOWERS QLD 4820, downloaded from CTRC's website (www.charterstowers.qld.gov.au) or by calling Council's Plumbing and Trade Waste Inspector on 4761 5300.

3.4.4 Food Waste Disposal Units

Food waste disposal units, such as garbage grinders and sink-to-sewer disposal units, may be approved for industrial and commercial use by specific application to CTRC subject to review of sewer and treatment capacity.

Guideline
The installation of food waste disposal units is discouraged as they place an unnecessary biological and solids load on sewerage infrastructure. Continued use of food waste units in industrial and commercial premises is not a sustainable solution for the disposal of food wastes. The use of food waste disposal units does not comply with CTRC's policies on water conservation, waste minimisation and cleaner production. Food waste should be recycled where possible using commercial service providers (e.g. composting).

3.4.5 Discharge of Wastes from Recreational Vehicles (Caravan Dump Points)

The discharge of domestic toilet waste from recreational vehicles, buses and caravans are permitted at approved discharge locations (caravan dump points). The Owner of the property on which the discharge will be made must hold a Trade Waste Approval for the discharge facility.

3.4.5.1 Application for Approval to Operate a Dump Point

Before CTRC will approve discharge from a caravan dump point, a property owner willing to take responsibility for managing and supervising the dump point must request approval to discharge waste from the dump point to the sewer at their property.

After the request for approval has been received, CTRC will assess whether the request meets its approval conditions for caravan dump points (principally in relation to sewer capacity, site supervision and security to prevent illegal discharges). However, discharge from caravan dump points may be approved where system capacity exists and the dump point meets CTRC's approval conditions.

To apply for approval to discharge waste via a caravan dump point at a property, the property owner should write to CTRC indicating the nature of the request and including the following details about the proposal:

- Property Owner's name
- Property address (on which the dump point will be located)
- Real property description
- Property Owner's postal address
- Property Owner's telephone contact details (including mobile telephone number if applicable)
- Property Owner's email address, and
- A hydraulic plan of the proposed connection.

3.4.5.2 Conditions Relevant to Caravan Dump Points

The application should address how the applicant intends to meet each of the following conditions:

- Approval is subject to capacity being available within the relevant sewer. Information should be provided as to the approximate peak volume (or number of loads) likely to be discharged daily
- The dump point shall be managed and supervised to ensure only domestic type waste is discharged (i.e. caravan black/grey water – caravan toilet, shower and kitchen wastewater)
- The dump point must be supervised when open and securely closed when it cannot be supervised (it is the responsibility of the approval holder to ensure the dump point's proper use)
- The approval holder is responsible for cleaning and maintenance and ensuring supervisors of the dump point are trained in its correct operation (a satisfactory submission will include reference to proposed maintenance activities and their frequency, and how supervisors will be trained or advised of their responsibilities)
- The dump point must be isolated from stormwater and protected from ingress of rainwater/groundwater/flood water
- Approval will be subject to the dump point meeting all Council and regulatory requirements (such as plumbing compliance, health approvals and development approval conditions), and
- No load shall be transferred to the dump point from a vessel with a volume greater than 100L (this is to prevent the use of the discharge point by commercial tankers).

Where an application is approved, the relevant conditions (including those described above) will be included in formal correspondence between CTRC and the Applicant.

3.4.5.3 Sewerage Connection

Once approval to operate a caravan dump point has been granted by CTRC, it will be necessary to determine whether a new sewerage connection is required (if the dump point is to connect directly to the sewer) or whether the dump point can be connected to private drainage.

Details of how to apply for a sewerage connection are available by visiting the CTRC Administration Centre located at 12 Mosman Street, CHARTERS TOWERS QLD 4820, from the website (www.charterstowers.qld.gov.au) or by calling Council's Plumbing and Trade Waste Inspector on 4761 5300.

3.4.6 Commercial Bin Wash

Discharges to sewer from bin wash facilities at commercial premises are trade waste and CTRC requires the property owner to hold a Trade Waste Approval. For clarity, this section does not apply to residential unit complexes or self-catered hostels with bin wash facilities. Unless otherwise advised by CTRC, commercial property bin washes are required to have:

- Adequate roofing (see section 3.3.4 for roofing guidelines), and
- A basket trap in floor wastes being of self-closing or fixed screen type.

Where a bin wash is connected to sewer at a property that is subject to a Trade Waste Approval (independent to the bin wash), CTRC will include the bin wash facility within the Trade Waste Approval with conditions that ensure:

- Adequate roofing (see section 3.3.4 for roofing guidelines)
- A basket trap in floor wastes being of self-closing or fixed screen type, and
- Discharge through a grease and/or silt arrestor.

3.4.7 Wastewater from Operational and Inactive Landfill Sites

CTRC interprets rainwater and groundwater that has contacted operational or disused landfill materials to be wastewater from a business or commercial activity and therefore trade waste. This wastewater can be accepted to sewer provided adequate monitoring data (at least three consecutive monthly sampling events) indicates contaminant concentrations consistently meet the sewer acceptance criteria and system capacity is available. Trade Waste Approvals for acceptance of landfill wastewaters to sewer should include conditions addressing the following matters:

- Direct magnetic flow metering in accordance with the current Trade Waste Metering Code of Practice
- Systems to ensure limitation of maximum flow rate
- Systems to ensure no wet weather discharge
- Routine self-monitoring of nominated contaminants, including billing parameters
- Annual self-monitoring of metals and organic analytes, and
- Provisions for the suspension or cancellation of the approval in the event of unacceptable contaminant levels or flow rates.

3.4.8 Ensuring Proper Chemical Storage

Chemical storage areas, such as dangerous goods and flammable goods stores and petroleum-dispensing areas must not be directly connected to CTRC's sewerage infrastructure (i.e. any leaks or spillage or overflows cannot be drained by gravity or by any automated means to the sewerage system).

Hazardous waste (including liquid hazardous waste) contained or collected in such areas cannot be discharged to CTRC's sewerage infrastructure unless specific written approval is granted. Applications for approval will be considered by CTRC on a case by case basis.

3.5 Ensuring Water Conservation

CTRC may exercise its discretion and not approve trade waste solutions that are wasteful. For example, this may apply where cooling water is used for any mechanical equipment or air conditioning plant without a recovery and water reuse system.

3.6 Ensuring Access to Carry Out Inspection of Nominated Premises

Under the *LG Act*, CTRC Officers may enter the land or facilities of Trade Waste Approval holders' nominated premises at a time that is mutually convenient (except for an emergency or under warrant) to determine compliance with a Trade Waste Approval condition (including those within this TWEMP), or notices issued hereunder, are being met. CTRC may:

- Measure trade waste flows
- Place monitoring equipment on site
- Take trade waste effluent samples
- Inspect pretreatment systems, fittings and works, or
- Inspect and obtain copies of records kept relating to the on-site management of trade waste, regulated waste and residual waste – including maintenance records for all equipment used to treat, sample or discharge trade waste.

Where there are security measures in force on the nominated premises which require formal identification and clearance before entry onto or into a premises, the approval holders should notify its security guards so that, upon presentation of suitable identification, a CTRC Officer may enter without delay for the purposes of performing specific responsibilities. Approval holders and any Occupier must ensure there is no unreasonable delay in giving Officers access to the nominated premises.

Approval holders must ensure adequate security is put in place to prevent interference with any CTRC monitoring equipment placed onsite.

Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled must be promptly removed by approval holders at the written or verbal request of CTRC and shall not be replaced. The costs of clearing such access shall be borne by the approval holder in all instances.

3.7 Ensuring the Keeping and Provision of Records

Approval holders must ensure (e.g. through delegation to the occupier) that all records of information obtained pursuant to any trade waste related activities required by this TWEMP or Trade Waste Approval are retained and made available for inspection and copy by CTRC. Records shall include:

- Test records for any stormwater diversion, first flush systems or other automated systems nominated within Trade Waste Approval conditions
- Pretreatment system maintenance
- Regulated/residual waste disposal dockets or certificates
- The date, exact place, method and time of trade waste effluent sampling
- The name of the person(s) collecting the trade waste effluent samples
- The dates on which analyses were performed, who performed the analyses and the analytical techniques or methods used, and
- Trade waste effluent analysis results in paper copy form.

These records must remain available for inspection by CTRC's Officer for a period of at least two (2) years or as otherwise notified by CTRC in a Trade Waste Approval.

3.8 Development and Implementation of Trade Waste Environmental Management Plans

If requested by CTRC, an approval holder must perform a trade waste audit at the premises and prepare a TWEMP and give a copy to CTRC within ninety (90) days of such request. A TWEMP details the onsite procedures and work instructions relating to the management of trade waste and the trade waste pretreatment system. CTRC may, at its sole discretion, suspend a Trade Waste Approval in the event the approval holder fails to comply with a request.

Guideline
A TWEMP should include (where relevant) notification procedures, contingency plans for spills and pretreatment system failure, maintenance schedules and waste removal contracts. It may also include: • *Description of discharge practices, including non-routine batch discharges* • *Employee training plans related to trade waste activities or incidents* • *Procedures for notifying CTRC of any accidental discharge, and* • *Procedures to prevent adverse impact from any accidental or shock load discharge.* *Such procedures may address inspection and maintenance of storage areas, handling and transfer of materials, control of plant site run-off, worker training, and/or measures and equipment for emergency response.*

3.9 Prompt Payment of Charges and Fines

Approval holders must pay CTRC the charges or other amounts referred to in Trade Waste Approval conditions, calculated in accordance with Charters Towers Regional Council's schedule of trade waste fees and charges. Approval holders are also liable for all fines and penalties arising from any breach of their legislative obligations, including under the *EP Act*, the *WS Act* and the *Plumbing and Drainage Act 2018*.

3.10 Notification of Breaches of Trade Waste Approval

Notice of breaches or potential breaches of Trade Waste Approval conditions must be given:

- By telephone as soon as practically possible and where requested
- In writing within seven (7) days of the date of the breach or potential breach, setting out:
  - The nature of the breach or potential breach
  - An explanation of the cause of the breach or potential breach
  - Trade waste effluent analysis results and/or flow measurements (where relevant)
  - Actions that have been taken to control the non-compliant discharge, and
  - What action is proposed to prevent its recurrence?

A notice of breach or potential breach will be given in accordance with this TWEMP which will be addressed and posted, emailed or delivered to the notice address of the party to which it is to be given.

A written notice given by the Trade Waste Approval holder to CTRC must be addressed to Corporate and Community Services and must be signed by the Trade Waste Approval holder or their duly authorised agent or representative.

A response to a notice of breach or potential breach must be provided in writing (using the title *Breach or Potential Breach of Trade Waste Approval*) via mail or email.

Mail:
Charters Towers Regional Council
C/- Plumbing and Trade Waste Inspector
PO Box 189
Charters Towers QLD 4820

Email:
mail@charters.towers.qld.gov.au

3.11 Ensuring Compliance after Permanent Cessation of Discharge

Approval holders must lodge a formal request if the trade waste discharge will cease or has ceased on a certain date. After the last day of operation, trade waste pretreatment infrastructure must be serviced, cleaned and sealed in accordance with the requirements of Charters Towers Regional Council's TWEMP. Trade waste charges will continue to apply up until the Approval holder lodges a properly completed Application to Cancel Trade Waste Approval, and CTRC gives express notice to the Approval holder of the cessation of discharge by the Approval holder.

4 PRETREATMENT REQUIREMENTS

4.1 Pretreatment Requirements for New Sources

When a new building or structure is designed for a commercial Occupier (e.g. food retailing, mechanical workshop) and such building or structure has a sewer that is intended to transfer wastes other than sanitary or domestic waste, minimum basic pretreatment infrastructure applies.

Pretreatment infrastructure is required for all business types; those whose discharge that does not comply with sewer acceptance criteria without pretreatment, refer to list in Appendix A3 for guidelines on basic pretreatment requirements. CTRC has the sole discretion to determine whether the discharge complies with its sewer acceptance criteria with basic pretreatment.

Where business types listed in Appendix A3.1 install and properly maintain the nominated basic pretreatment infrastructure, their discharge is usually deemed to comply with sewer acceptance criteria, provided the discharge does not exceed a flow of 10kL/day or contaminant load of 20kg/day biochemical oxygen demand (BOD). CTRC may, at its sole discretion, monitor the quality of any trade waste discharge, at the Approval holder's cost.

Approval holders must ensure readily available and reasonable methods of trade waste prevention, control, and pretreatment are undertaken on the nominated premises to achieve compliance with this TWEMP and its sewer acceptance criteria.

Approval holders must ensure that:

- Trade waste pretreatment infrastructure detailed on the approved Hydraulic plans is installed and used at the nominated premises, and
- Trade waste pretreatment infrastructure is properly operated and maintained in accordance with the manufacturer's guidelines to ensure it always remains in a sanitary and efficient operating condition.

4.2 Sizing of Basic Pretreatment Infrastructure

The following sizing requirements for basic pretreatment infrastructure apply to all new or replacement equipment as described below, installed after the effective date of this TWEMP. Existing non-compliant pretreatment infrastructure may not need to be replaced retrospectively, except where (at the sole discretion of CTRC) the system is negatively affecting the sewerage system.

- For new or replacement basic pretreatment devices (grease silt traps and oil silt traps) the minimum size is 1000L
- Where unusual circumstances exist, CTRC may, at its sole discretion, provide written consent for smaller pretreatment infrastructure if a request and justification is made in writing by a qualified Hydraulic Engineer representing the Applicant
- Grease interceptors, silt traps and oil separators/interceptors must be sized to provide a minimum of one-hour retention at peak hourly trade waste flow
- The peak hourly trade waste flow should be calculated using the total of the guideline flows attributable to each trade waste generating fixture (see Appendix 4)
- Alternative peak hourly flow estimates will be accepted where a qualified Hydraulic Engineer attests to the peak flow and design (thereby providing a performance guarantee for the system design and taking responsibility for any failure to meet sewer acceptance criteria)
- The maximum allowable capacity of any one grease silt trap is 5000L; unless CTRC provides written consent for other sizing (consideration must be given to the adequacy of the applied flow rate at the time of installation)
- Where tenancy occupiers are unknown (i.e. new set of shops), the minimum grease silt arrestor sizing requirements are as follows:
    - minimum grease interceptor, silt trap capacity allocation for the first connected tenancy is 1000L, and
    - minimum grease interceptor, silt trap capacity allocation for each additional tenancy shown as connected to trade waste is 500L; unless –
    - the Applicant provides documentation with submitted Hydraulic Plans justifying an alternative pretreatment allowance.
- Discharge of trade waste to some sewers may need to be restricted during peak flow periods

- Points of discharge may have to be relocated to separate domestic sewage from trade waste
- Approval holders may be required to install and maintain a suitable storage and flow-control facility to ensure equalisation of flow, and
- Approval holders with the potential to discharge flammable substances may be required to install and maintain an approved explosive gas detection meter.

Guideline
Approval holders should aim to continually reduce the impact trade waste has on local house drainage, trade waste pretreatment infrastructure and CTRC's sewerage infrastructure. The following on-site waste management practices should be implemented to reduce the impact of trade waste on pretreatment infrastructure and water/trade waste costs: - *maintain trade waste pretreatment equipment* - *ensure gross solids are not discharged to any drain and sewer. Solid food scraps and residues from plates and kitchen equipment should be scraped into solid waste bins* - *dry basket arrestors (strainers) with a fixed screen or an automatic closing mechanism that prevents discharge to sewer when the basket/strainer is removed should be installed in sink and floor drains* - *educate occupiers and staff not to leave taps running* - *install flow restriction devices where possible* - *remove in-sink food waste disposal units* - *initiate recycling of waste cooking oil, paper, cardboard and glass, and allocate waste management responsibility to employees.*

4.2.1 Water Services Association of Australia (WSAA) Evaluation

Applicants seeking evaluation of pretreatment products should refer to the WSAA website – www.wsaa.asn.au. Details required by WSAA are included on the WSAA Product Appraisal Application Form for Trade Waste Pretreatment Products, available at https://www.wsaa.asn.au/ProductAppraisals/Pages/default.aspx.

4.3 Pretreatment Infrastructure Maintenance Requirements

Approval holders must ensure proper maintenance of trade waste pretreatment infrastructure in accordance with Trade Waste Approval conditions. Adequately sized basic pretreatment infrastructure must be serviced in accordance with the manufacturer's recommendations or as described below:

- Grease/silt arrestors: At least once every 12 weeks and/or three months unless otherwise specified by CTRC within the Trade Waste Approval (including cleaning sides and lids)
- Oil/silt arrestors: Triple interceptor types at least once every 12 months unless otherwise specified by CTRC within the Trade Waste Approval, and
- Plate separator types: At the frequency specified by the manufacturer (as a minimum) unless otherwise specified by CTRC within the Trade Waste Approval.

More frequent servicing may be a condition of the Trade Waste Approval.

Where a premises has under-sized or inadequate basic pretreatment infrastructure, such as pre-existing grease silt arrestors with a treatment capacity less than 550L, the Owner may be required to:

- Service the unit more frequently (rate to be determined by CTRC on a site by site basis), and
- Install a dry basket arrestor (strainer), with a fixed screen or an automatic closing mechanism that prevents discharge to sewer when the basket/strainer is removed, in all connected sink and floor drains.

If failure to maintain trade waste pretreatment infrastructure results in interference to CTRC's sewerage infrastructure (e.g. sewer blockage) or causes a public health risk, the approval holder responsible for the infrastructure will be subject to the remedies detailed in section 7 including enforcement and possible cost recovery claims.

Grease, fat, mineral oil, hydrocarbon products, residual wastes and regulated wastes that are removed from trade waste pretreatment infrastructure must not be discharged into CTRC's sewerage infrastructure unless specifically approved by CTRC.

The use of authorised trade waste additives, such as bacterial cultures and enzymes, in pretreatment infrastructure and sewer pipes, cannot be used as a substitute for pretreatment infrastructure maintenance.

Pretreatment infrastructure under this form of treatment must continue to be regularly serviced by the complete evacuation method at a frequency determined by negotiation.

Petroleum oil/silt – water separation systems must be visually inspected on a routine basis for system leaks and trade waste effluent quality. There must be no free-floating mineral oil or hydrocarbon product discharging to CTRC's sewerage infrastructure. Any free-floating debris in the system must be manually removed on a routine basis and disposed of in accordance with legislative requirements.

4.3.1 Pretreatment Infrastructure in Multiple Tenancies

Where a commercial property is divided into multiple tenancies (such as a premises with separate areas used as individual tenancies), the Trade Waste Approval is issued to the property owner. The person responsible for maintaining trade waste pretreatment infrastructure used or shared by the tenancies is the property owner. Non-Compliance Notices for inadequate servicing of pretreatment infrastructure located within the property will be sent to the owner and a copy will be sent to the Approval holder.

4.3.2 Pretreatment Infrastructure in a Community Title Scheme

Within a Community Title Scheme (CTS), the Trade Waste Approval is issued to the owner of the lot upon which the trade waste is generated. The lot Owner, as the Approval holder, is responsible for maintaining trade waste pretreatment infrastructure.

The person responsible for maintaining trade waste pretreatment infrastructure located within CTS common property is determined by the origin of the trade waste:

- Where the trade waste originates from a lot (other than common property) the lot Owner holds the Approval and is responsible for maintenance of the pretreatment infrastructure to which the Owner's waste discharges. This may require the approval holder to broker maintenance arrangements with the body corporate or other lot Owners (in the case of shared infrastructure) but responsibility remains with the Approval Holder, or
- Where the trade waste originates from the common property (e.g. for a bin wash or cooling tower) the body corporate identified on the community management statement for the CTS will hold the Trade Waste Approval and is responsible for maintenance of the pretreatment infrastructure to which the waste discharges.

In all cases, Non-Compliance Notices for inadequate servicing of pretreatment infrastructure located within a CTS lot will be sent to the Approval Holder.

Guideline
Pretreatment systems should be maintained in accordance with manufacturer's specifications and maintenance activities should be detailed on the maintenance schedule for the site. Pretreatment devices with WaterMark approval will be preferred over non-Watermarked units.

4.4 Stormwater

The discharge of uncontaminated stormwater/surface water and roof run-off into CTRC's sewerage infrastructure is prohibited. See section 3.3.1. However, contaminated first flush water collected from trade waste generating areas may (at the sole discretion of CTRC) be approved for discharge to sewer – see section 4.4.3.

The use of harvested stormwater in trade waste generating activities (e.g. vehicle washing) may also be approved - see section 4.4.3.

4.4.1 Trade Waste/Stormwater Diversion Systems

A rain-sensor linked trade waste/stormwater diversion system will only be approved to allow connection of an external trade waste generating area to Charters Towers Regional Council's sewerage infrastructure in situations where:

- adequately roofing such an area is not possible, and
- the catchment area for the system is confined to such an area (e.g. wash pad).

All trade waste/stormwater diversion infrastructure must divert trade waste to a pump well located before an authorised pretreatment system. All trade waste generated on-site must be pumped through the trade waste pretreatment system prior to discharge to CTRC's sewerage infrastructure.

The water supply to the wash area and power to the trade waste discharge pump must be automatically disconnected when the rain sensor detects a predetermined rain event. The system must be reset after a specified time delay. Rain events and time delays will be negotiated on a case by case basis taking into account site conditions.

A trade waste effluent flow meter may need to be installed within the system to directly measure the volume of trade waste discharged to CTRC's sewerage infrastructure.

The Approval holder must ensure that either the diversion system manufacturer or its authorised agent inspect and certify correct operation of the system at least every 12 months. The Approval holder must hold all inspection certificates at the site and make these available to CTRC on request.

The Approval holder must ensure that trade waste/stormwater diversion infrastructure is maintained in a satisfactory and efficient operating condition at all times.

4.4.2 First Flush Collection Systems

A first flush collection system is an adjunct to trade waste/stormwater diversion infrastructure detailed in section 4.4.1. First flush water must be collected in a suitably sized separate holding tank. The system design must ensure that adequate first flush capacity is maintained during normal trade waste generating activities (e.g. the holding tank should not be the pump well associated with trade waste/stormwater diversion infrastructure detailed in section 4.6.1 unless other methods to ensure adequate holding volume at all times are included in the design).

First flush water that cannot be treated and re-used on-site is deemed to be trade waste. Such trade waste must be discharged to sewer in accordance with section 4.4.1 no sooner than 24 hours after any rainfall event in excess of 5mm of rain falling in any one-hour period (as measured by the on-site rainfall measurement device).

A trade waste effluent flow meter must be installed within the system to directly measure the volume of trade waste discharged to CTRC's sewerage infrastructure.

In this section, first flush water means the volume of potentially contaminated stormwater that is generated in the first 10mm of rainfall during a rain event from an impervious unroofed trade waste generating area (e.g. concrete or bitumen washing area). For example, a 100m^2 wash pad would generate 1000L (100m^2 x 0.01m = 0.1m^3 or 1000L) of first flush water during any rain event greater than 10mm.

This section does not apply to stormwater harvesting from non-trade waste generating areas such as car park areas, roofing and urban stormwater infrastructure.

4.4.3 Collecting Storm/Roof Water for Use in Trade Waste Generating Activities

In systems where stormwater/roof water is used as an alternative water supply to trade waste generating activities, the system must employ:

- An approved trade waste effluent flow meter to directly measure the volume of trade waste discharged to CTRC's sewerage infrastructure, or
- Include sub-metering of all input water supplied to trade waste generating areas.

All meters must meet the requirements described in section 5.

Under the *WS Act*, excess stormwater collected during major rain events (i.e. stormwater that cannot be stored for later use or directly used in trade waste generating activities) cannot be disposed to sewer under any circumstances.[2]

Where stormwater/roof water is used in trade waste generating activities, diversion, treatment and disposal options for excess stormwater will need to be detailed in the Trade Waste Approval Application (e.g. treatment and diversion to council stormwater infrastructure either directly or via ponds and/or wetlands).

Guideline

[2] *Water Supply Act (Safety and Reliability) Act 2008*, Section 193(1)

Stormwater may be collected for use in trade waste generating activities such as washing/rinsing and evaporative air-conditioning cooling tower feed water. Stormwater may be harvested from unroofed car parking areas, roof run-off and urban stormwater infrastructure. Harvested stormwater may need to be treated to remove contaminants and disinfected to kill micro-organisms prior to re-use. Both of these processes will also help to control the generation of offensive odours within on-site storage tanks.

Stormwater used in trade waste generating activities may be discharged to sewer as trade waste in accordance with Trade Waste Approval Conditions. It is recommended applicants proposing stormwater harvesting/trade waste schemes consult with an environmental scientist or water/wastewater engineer and an CTRC Officer prior to Application.

4.5 Food Retailing/Processing and Hospitality Industry

Trade waste generating activities in the food retailing/processing and hospitality industry include:

- Preparing food to cook or package (e.g. rinsing)
- Washing up
- Cleaning bench-tops, ovens and floors
- Bleed water from evaporative air-conditioning cooling towers
- Boiler blow down water, and
- Refrigeration condensate.

Most trade waste generated by the food retailing and processing industry must be pretreated using an adequately sized pretreatment system that is designed for the removal of gross contaminants such as oil, fat, grease and silt.

Guideline
The following food service activities may not be required to extensively pretreat their trade waste: *- takeaway sandwich bars with no cooking of food* *- coffee shops where all solid food is brought in pre-cooked and no food is cooked on-site, and* *- hot bread kitchens with no cooking of pastry products.* *A list of businesses that are required to install basic pretreatment infrastructure is provided in Appendix 3. For the purpose of determining pretreatment requirements, cooking is defined as 'the use of an appliance for heating, frying, boiling, steaming or baking foods, other than heating or holding previously cooked foods at serving temperature'. For clarity, cooking does not include the preparation of hot tea or coffee.*

4.6 Motor Trades Industry

Trade waste generating activities in the motor trades includes:

- Degreasing and washing of engines, gearboxes and automotive parts
- Washing of workshop floors contaminated with hydrocarbons
- Washing of motor vehicles, trucks and heavy machinery
- Rub down and paint scrapings from panel and smash repair shops, and
- Waste from flushing of radiators and engine blocks.

Trade waste generated by the motor trades' industry must be pretreated using an adequately sized pretreatment system that is designed for the removal of petroleum oil and silt. Raw or depleted degreasing substances or baths of detergent cleaners, hydrocarbon cleansers, caustic soda, phenol/cresol solutions, cresylic acid and chlorinated hydrocarbons must not be discharged into sewer as trade waste. These wastes are residual regulated wastes that must be disposed off-site at a licensed treatment and disposal facility.

If detergents are being used in the generation of oily water wastes, then such detergents must be 'quick breaking' to rapidly break the emulsion and improve oil separation in the pretreatment system.

4.7 Photogenic and Imaging Industry

Small volumes of trade waste containing silver at a concentration less than 5000 mg/L may be discharged to sewer under a Trade Waste Approval if the total mass of silver discharged per day is less than 2 grams. Alternatively, there are two disposal options for high strength silver wastes:

- Install a silver recovery unit (registered by Photographic Uniform Regulations for the Environment (P.U.R.E.)) to reduce the silver concentration to less than 50 mg/L and obtain a Trade Waste Approval from CTRC to discharge this pretreated trade waste to sewer, or
- Collect and store high strength silver waste and arrange for periodic collection of this waste by a licensed contractor.

Note that option 2 above may still require a Trade Waste Approval to be issued approving the discharge of spent developer solutions and rinse waters to sewer.

Either a water trap (minimum water volume of 500 millilitres) with inspection opening or a mixing chamber (minimum water volume of 5 litres) with a designed access point must be installed in plumbing works immediately down-sewer from the silver recovery unit to allow sampling of trade waste effluent.

Guideline:
Operators in the photographic and imaging industry, such as photographic labs, x-ray and graphic arts, should maintain their business in compliance with the P.U.R.E Code of Practice for Photographic Waste Liquids. *The P.U.R.E. Code of practice aims to encourage responsible management of the residual liquid wastes within the photographic and imaging industry. By adopting the Code of practice, operators should be able to minimise the mass of contaminants, particularly silver, ammonia and sulphur compounds discharged to CTRC's sewerage infrastructure.* *For more information, contact P.U.R.E. (Photographic Uniform Regulations for the Environment) - a division of The Photographic and Imaging Council of Australia (PICA). For enquiries about P.U.R.E. email pma@pmai.org*

4.8 Metal Finishing Industry

Trade waste discharged into CTRC's sewerage infrastructure from metal finishing industries, such as galvanising, electroplating, powder coating and anodising operations, must pass through a pretreatment system designed for the removal of one or more of the following applicable contaminants (as relevant depending on on-site activities):

- Cyanide
- Heavy metals (generally cadmium, chromium, copper, nickel and zinc) and aluminum
- Suspended solids
- Acid, and
- Alkali (caustic).

Automated pretreatment systems with chemical dosing units must be designed with fail-safe redundancy systems that prevent overstrength discharges to CTRC's sewerage infrastructure upon system failure.

Guideline
The Trade Waste Sewer Acceptance Criteria in Appendix A2 advise of standards for the disposal of heavy metals into CTRC's sewerage infrastructure. Adopting these standards will decrease the heavy metal contamination of biosolids and allow CTRC to beneficially re-use biosolids. *More stringent conditions may be imposed in sewerage catchment areas where there is an identified problem with heavy metals accumulation.* *The continued use of critical toxic substances, such as cyanide and cadmium, in the metal finishing industry is discouraged. CTRC encourages the implementation of waste reduction strategies, such as better housekeeping and cleaner production, whereby dischargers may be able to achieve significant economic gains and reduce their impact on CTRC's sewerage infrastructure. Staff training and awareness in trade waste management is a key component of any waste reduction program.*

4.9 Laboratories

Scientific or medical laboratories must have systems in place to manage the disposal of the various prohibited substances used at such facilities – see section 3.3. All prohibited substances and regulated wastes must be stored on-site and transported off-site for disposal at a licensed facility.

Trade waste from small educational, commercial scientific and medical laboratories must be discharged through an authorised dilution chamber. Neutralisation of trade waste (marble chips or caustic addition) may not be required.

Trade waste from medium to large commercial, institutional and medical laboratories such as those at universities and hospitals, must be discharged through a silt trap and/or dilution chamber. Neutralisation of trade waste is likely to be required.

Refer also to healthcare industry waste restrictions, which may be applicable to laboratories, detailed within section 3.3.6.

4.10 Commercial and Institutional Swimming Pools

This section does not apply to domestic swimming pools. A domestic swimming pool is a pool at a residential property where the general public is not charged for using the facility (i.e. a swimming pool at a residential high rise complex is usually a domestic swimming pool).

Stormwater is a prohibited discharge to sewer.[3] Pool water discharged by gravity from the overflow relief structure of an unroofed pool during a rain event is deemed to be stormwater and must not be discharged into CTRC's sewerage infrastructure. Plumbing and drainage from such overflow relief structures must not be connected to CTRC's sewerage infrastructure.

The backwash water from commercial and public swimming pools must not be discharged to CTRC's sewerage system without a Trade Waste Approval.

Due to the risk of sewer surcharge during pool filter backwash operations, pool trade waste must be discharged to CTRC's sewerage infrastructure at a rate no greater than 1 litre per second or at a rate specified in Trade Waste Approval Conditions (i.e. higher rates may be approved if discharging into a larger diameter sewer). This will generally require pool backwash water to be pumped to sewer from a suitably sized on-site holding tank.

Guideline
Trade waste generated by pool filter backwash at commercial swimming pools may be approved for discharge into CTRC's sewerage infrastructure. Customers may be required to install a trade waste pretreatment system, such as screens or silt traps, to remove excessive solids such as lint, sand and inert solids prior to discharging filter backwash water into CTRC's sewerage infrastructure at a rate less than 1L per second. This will generally require that the pool backwash water be pumped to sewer from a suitably sized on-site holding tank.

4.11 Evaporative Cooling Towers

Trade waste generated from the operation and maintenance of evaporative cooling towers (e.g. for air-conditioning) can be discharged directly into CTRC's sewerage infrastructure without pretreatment subject to the approval holder ensuring the evaporative cooling towers must operate and be maintained in compliance with relevant Australian Standards (including *AS/NZS 3666.2:2011* and *AS/NZS 3666.3:2011).*

During the Trade Waste Approval Application or Renewal process, CTRC must be notified of the type(s) of chemical additives (i.e. biocide, anti-corrosion and anti-flocculants) used in cooling towers and the chemical constituents in each additive. Safety Data Sheets (SDS) for each proprietary chemical used in cooling tower water should be attached to application and renewal forms. SDS' are available from the chemical manufacturer or agent.

Cooling tower water discharged to sewerage as trade waste (bleed wastewater and wastewater generated from in-line and system decontamination) must comply with the trade waste sewer acceptance criteria (Appendix A2). Note that the Trade Waste Sewer Acceptance Criteria for chlorine (biocide) is 10mg/L – this concentration is the maximum recommended in AS/NZS 3666 when performing system decontamination.

Due to regulatory requirements relating to cooling tower system decontamination, large volumes of cooling tower water need to be disposed to sewerage in a relatively short period of time. Specific Trade Waste Approval

[3] *Water Supply Act (Safety and Reliability) Act 2008*, Section 193(3)

Conditions may require notification of significant discharges to CTRC infrastructure. The maximum instantaneous rate of trade waste discharge allowed from cooling towers is 5L per second.

4.12 Commercial and Institutional Laundries

Trade waste from large commercial or institutional laundries must be discharged through a pre-treatment system designed to:

- Reduce temperature to 38°C, such as a dilution chamber or heat exchanger, and
- Remove gross contaminants such as lint, sand and inert solids.

Due to the variation of water retained in washed material, a trade waste flow meter may need to be installed to directly measure the volume of trade waste discharged to CTRC's sewerage infrastructure.

4.13 Other Commerce and Industry

Any other commerce or industry producing trade waste containing grit, sand, oils, lint, inert solids or other materials which have the potential of causing partial or complete obstruction within CTRC's sewerage infrastructure must use a trade waste pre-treatment system, such as screens, interceptors, oil/water separators and holding tanks, to remove the excessive contaminants.

Where commerce or industry produces trade waste containing contaminants that alone, or when mixed with other contaminants in the sewerage system, may affect the attainment of CTRC's trade waste objectives, it is the responsibility of the Applicant (or Trade Waste Approval Holder) to provide a reliable pre-treatment solution capable of meeting the sewer acceptance criteria (Appendix A2) and any specific criteria that CTRC requires. For clarity, this means Council Officers are not responsible for recommending or designing pre-treatment solutions.

5 DETERMINING TRADE WASTE QUANTITY AND QUALITY

5.1 Determination of Trade Waste Quantity (Flow)

The quantity of trade waste discharged to CTRC's sewerage infrastructure is measured in kilolitres (kL) and is determined by the method detailed below.

The direct measurement method uses an approved effluent flow meter installed in the trade waste drainage, owned and maintained by the Approval holder and is read by CTRC on a routine basis for the levying of trade waste charges. Trade waste effluent meters must provide a totalised volume and must be serviced and calibrated according to Trade Waste Approval Conditions.

Trade waste effluent meters must be safely accessible to CTRC's meter readers during normal business hours, and the meter and meter display must be located in accordance with accessibility requirements described in the *Queensland Plumbing and Wastewater Code*.

5.2 Application of Trade Waste Quality Links

The measurement of quality parameters will not usually be applied to trade waste discharged from the following general business types:

- Automotive and mechanical workshops
- Foodservice and hospitality industries
- Minor food manufacturing
- Education
- Health services
- Beauticians and hairdressers
- Care facilities
- Veterinary
- Air conditioning and cooling towers, and
- Selected commercial processes.

Trade waste from the above industries is usually deemed to comply with the Trade Waste Sewer Acceptance Criteria, excluding prohibited substances, where the waste discharge is pre-treated using fit for purpose and properly maintained basic trade waste pre-treatment infrastructure (i.e. business types listed in Appendix A3.1).

For other industries, the quality of trade waste shall conform to Trade Waste Approval Conditions or, if no contaminants are detailed within the Trade Waste Approval, the Trade Waste Sewer Acceptance Criteria (Appendix A2). Specific concentration and load limits for contaminants may be applied in variation to the Trade Waste Sewer Acceptance Criteria if approved by CTRC.

Consideration of the impact of the concentration and total daily mass of the contaminant on CTRC's trade waste objectives will determine all specific quality limits. The impact shall be assessed in terms of sewerage worker health, sewer asset condition, treatment plant processes and contamination of final treated effluent and biosolids.

6 AUDIT, INSPECTION AND MONITORING

6.1 General Provisions

For the purpose of monitoring and auditing the conditions of discharge, CTRC's Officers will inspect premises referred to in all categories of Trade Waste Approval. Priority will be given to inspections of higher risk customers, but inspections may take place at any Trade Waste Approval holder's premises.

Inspections may be undertaken, without limitation, to ensure the following:

- That pre-treatment facilities are regularly and properly serviced and standby equipment is available where necessary
- All storage areas are properly isolated and are not improperly connected to sewer
- There are no unauthorised trade waste connections to sewer
- There are no illegal stormwater connections to the trade waste system or sewerage
- There are no illegal trade waste connections to stormwater and that there is no potential for trade waste to flow improperly to sewer, stormwater or waterways
- That monitoring of strength and flow is undertaken as required under the Trade Waste Approval, and
- That work practices do not result in a breach of the Trade Waste Approval or legislation.

6.2 Sampling and Monitoring Standards

Trade waste effluent sampling must be representative of the trade waste effluent from the normal on-site daily operations and all trade waste samples are to be taken in accordance with the *Environmental Protection (Water and Wetland Biodiversity) Policy 2019, Monitoring and Sampling Manual – Environmental Protection (Water and Wetland Biodiversity) Policy 2019*, available via Department of Environment and Science.

Samples are to be taken as 24-hour flow-weighted composites unless otherwise stated in the specific conditions of the relevant Trade Waste Approval.

6.3 Inspection Chambers and Monitoring Facilities

6.3.1 Deemed Quality Categories (Cat A, B and C)

Approval holders may be required to provide an inspection opening on the trade waste discharge line within the property boundary in an area which is safe and accessible at all times to allow for sampling and monitoring equipment to be installed and operated.

6.4 Customer Self-Monitoring and Reporting

Approval holders may be required to ensure that the quality of the trade waste effluent discharged from the nominated premises is self-monitored on a routine basis.

The frequency of self-monitoring is determined by CTRC. The higher the risk, the more self-monitoring may be required. Trade waste self-monitoring requirements (including parameters to be monitored) will be detailed in Trade Waste Approval Conditions. Self-monitoring of trade waste effluent provides:

- Improvement in process control
- Demonstration of compliance with Trade Waste Approval Conditions, and
- The approval holder is required to meet all costs of self-monitoring.

Trade waste self-monitoring data shall be included in calculation of trade waste quality charges for any quality assessment period, but specific monitoring data may be excluded at the request of the approval holder at the discretion of CTRC. Justification for the exclusion of specific self-monitoring data will be required (and may include evidence of a process aberration at the time of sampling).

Where excluded self-monitoring data indicates a short-term over-strength discharge, costs may be calculated and billed as a special disposal (refer to section 8.5).

Self-monitoring data must be lodged to CTRC prior to the end of each quality assessment period.

6.4.1 Initial Compliance Monitoring and Reporting

Approval holders that are discharging for the first time into CTRC's sewerage infrastructure, or who have significantly upgraded or altered their trade waste pretreatment system may be required to ensure sampling and analysis of trade waste effluent discharged from the premises is carried out a minimum of once per fortnight for a minimum period of twelve (12) weeks after first introduction of trade waste from the premises into CTRC's sewerage infrastructure (initial compliance monitoring). Trade waste monitoring requirements will be detailed in Trade Waste Approval Conditions.

Where an initial compliance monitoring program has been requested by CTRC, an initial compliance report must be sent to CTRC within sixteen (16) weeks of first introduction of trade waste from the premises into CTRC's sewerage infrastructure. The initial compliance report must contain the following information:

- A record of the time, date and name of the sampler for all samples collected
- A record of the concentration of the analysed contaminants for all sampling events within the twelve (12) week monitoring period
- A record of all relevant water meter or trade waste effluent flow meter readings at time of collection of all grab samples or, for composite samples, at time of sample commencement and sample finishing, and
- A statement of compliance or non-compliance with the Trade Waste Approval.

Within ninety (90) days following the Trade Waste Approval issue date, the trade waste discharge must comply with this TWEMP and applicable Trade Waste Approval Conditions.

6.4.2 Ongoing Compliance Monitoring and Reporting

Approval holders undertaking self-monitoring are required to ensure that:

- Sampling and analysis of trade waste effluent discharged from the premises is conducted in accordance with Trade Waste Approval Conditions, and
- Periodic monitoring reports are forwarded to CTRC within 7 days of receipt (by the approval holder) of the finalised laboratory results, and should include the following information:
  - a record of the time and date and concentration of the analysed contaminants for all sampling events conducted since the previous periodic compliance report
  - a record of all water meter and/or trade waste effluent flow meter readings at time of collection of all grab samples; or, for composite samples, at time of sampling commencement and sampling finishing
  - a calculation of the sampling period mass load for all analysed contaminants for all composite samples, and
  - a statement of compliance or non-compliance with this Trade Waste Approval with associated comments.

If applicable, trade waste flow meter accuracy certification reports must be attached to the June and December reports. Trade waste monitoring requirements will be detailed in Trade Waste Approval Conditions.

6.4.3 Additional Monitoring during Non-Compliance Events

If trade waste effluent self-monitoring indicates the occurrence of a breach of this TWEMP or a Trade Waste Approval Condition, the Approval holder must notify CTRC as detailed in section 7.6. Notice of breaches must be given:

- By telephone (as soon as practically possible), and
- In writing, within seven (7) days of the date of the breach, setting out:
  - the nature of the breach
  - an explanation of the cause of the breach
  - trade waste effluent analysis results and/or flow measurements
  - actions that have been taken to control the non-compliant discharge, and
  - what action is proposed to prevent its recurrence?

Repeat trade waste effluent sampling must be undertaken within two (2) working days of the receipt of the first laboratory report (either draft or otherwise) detailing the results indicating a breach.

A breach sampling report must be sent to CTRC within fourteen (14) days of the initial breach event detailing the following minimum information:

- Laboratory report detailing the chemical analysis results for the repeat sampling event and any associated trade waste flow measurements
- Comment on whether or not the trade waste discharge is in compliance, and
- What future actions, if any, are to be undertaken.

6.5 CTRC Monitoring Program

Continued connection to and use of CTRC's sewerage infrastructure is subject to CTRC's premises inspection and trade waste sampling program. Sampling events will occur at a frequency determined by the Approval holders:

- Trade waste discharge category, and
- Australian and New Zealand Standard Industrial Classification.

The cost of the CTRC routine monitoring program is covered by the annual trade waste discharge fees.

7 POWERS OF CHARTERS TOWERS REGIONAL COUNCIL

CTRC has powers under different statutes which it may use or rely on in relation to trade waste matters. Examples of these powers are highlighted below.

7.1 To Make Trade Waste Approval Decisions

CTRC will assess the information provided by the Applicant on the Applicant's Trade Waste Approval Application form and Hydraulic Services Design Plan. If insufficient information is provided for CTRC to make a decision, CTRC may require the Applicant to provide additional information. Within ten (10) working days of receipt of a complete Trade Waste Approval Application, CTRC will determine whether or not to issue a Trade Waste Approval (subject to any request for information required to make the decision). Incomplete Trade Waste Approval Application forms will be returned to the Applicant for completion.

CTRC may refuse to accept any trade waste to its sewerage system that it reasonably believes would cause interference or obstruction to its stated trade waste objectives. In these situations, the Trade Waste Application will be refused and the Applicant will be notified of the grounds of refusal.

7.2 To Impose Trade Waste Approval Conditions

CTRC may, at its sole discretion, include in a Trade Waste Approval such conditions as are reasonably necessary to:

- Protect worker health and safety
- Prevent pass through or interference
- Protect against damage to CTRC's assets
- Protect the quality of the water body receiving STP effluent
- Facilitate CTRC's STP bio solids and effluent re-use strategies, and
- Address any other matter that CTRC regards as material.

7.3 To Vary Trade Waste Approval Terms And Conditions

Without limiting CTRC's power to vary a Trade Waste Approval, CTRC may negotiate with the Trade Waste Approval holder and subsequently, vary the Trade Waste Approval for any reason including, but not limited to, the following examples:

- To incorporate any new or revised federal, state, or local statutory requirements
- To address significant alterations or additions to the on-site operations, processes; or trade waste volume or character since the date of Trade Waste Approval issuance
- A change in CTRC's sewerage infrastructure that requires either a temporary or permanent reduction or elimination of the approved trade waste discharge
- Information indicating that the approved compliant trade waste discharge poses a threat to CTRC's sewerage infrastructure, CTRC personnel, or the receiving waters
- Violation of any terms or conditions of the Trade Waste Approval
- Misrepresentations or failure to fully disclose all relevant facts in the Trade Waste Approval Application or in any required reporting
- To correct typographical or other errors in the Trade Waste Approval, or
- To reflect a transfer of land ownership and/or Operator to a new Owner/Operator.

7.4 To Have Access

Under the *LG Act*, CTRC Authorised Officers have the right to access or enter an Approval holder's land and premises to conduct regular trade waste inspections and sampling events.

7.5 To Issue Notices

CTRC may give any notice under any law or this TWEMP to an Approval holder and any persons acting under the Trade Waste Approval. CTRC shall have the right to set up on an Approval holder's land or premises or require the installation of, such devices as are necessary to conduct sampling events and/or metering of the on-site operations relating to the trade waste discharge.

7.6 Non-Compliance/Breach Process

Where CTRC finds that an Approval holder has breached (or continues to breach) or failed to comply with (or continues to fail to comply with) any provision of this TWEMP or a Trade Waste Approval condition or order issued hereunder, CTRC may issue a Trade Waste Notice to remedy the breach or non-compliance.

Submission of any report in response to a Trade Waste Notice in no way relieves the Trade Waste Approval holder of liability for any breach occurring before or after receipt of a Trade Waste Notice.

Nothing in this section limits or restricts the authority of CTRC to serve a Compliance Notice, take any action, including emergency actions or any other enforcement action, without first issuing a Trade Waste Notice to remedy. Issuance of a Trade Waste Non-Compliance Notice shall not be a bar against, or a prerequisite for, taking any other action against the Trade Waste Approval holder. The ultimate responsibility is on the approval holder to comply with the requirements stated in CTRC's Trade Waste Non-Compliance Notice and Show Cause Notice.

7.6.1 Level 1 Trade Waste Non-Compliance Notice

As soon as possible after CTRC becomes aware the Trade Waste Approval holder has breached or not complied with a trade waste condition or requirement, CTRC may serve upon the Trade Waste Approval holder or the holder's managing agent a written Level 1 Trade Waste Non-Compliance Notice. CTRC may select any means of service that is reasonable under the circumstances.

The Level 1 Trade Waste Non-Compliance Notice will contain the following information:

- The date of the breach
- Details of the breach
- Immediate actions required to be undertaken on the nominated premises, and
- A direction to the approval holder to come into compliance within a specified time period not to exceed 28 days from the notice issue date or submit (for CTRC consideration) a compliance schedule to CTRC detailing how the trade waste discharge will come into compliance within a specified reasonable timeframe.

The Level 1 Trade Waste Non-Compliance Notice will request the approval holder to state in writing to CTRC:

- Reasons why the breach occurred, and
- What actions have been taken to ensure the type of breach will not re-occur.

The Level 1 Trade Waste Non-Compliance Notice may require the Trade Waste Approval holder to:

- Service or maintain pretreatment infrastructure
- Improve the quality of trade waste effluent
- Reduce the flow of trade waste effluent
- Stop certain activities from being undertaken on the nominated premises
- Install additional pretreatment equipment, or
- Increase the frequency of self-monitoring events.

In response to the Level 1 Trade Waste Non-Compliance Notice, the Trade Waste Approval holder may submit a compliance schedule to CTRC detailing how the trade waste discharge will come into compliance within a specified reasonable timeframe. The compliance schedule must meet the following criteria:

- The schedule shall demonstrate why CTRC should agree to allow greater than 28 days for the approval holder to achieve compliance
- The schedule shall contain increments of progress in the form of project steps with associated milestone dates for the commencement and completion of major events leading to the compliance with applicable Trade Waste Approval conditions or this TWEMP. Such project steps may include hiring an engineer or consultant, completing preliminary plans, completing final plans, executing a contract for major components, commencing construction, completing construction, commissioning new plant and monitoring discharges
- The maximum number of project steps in a compliance schedule is six (6) and the maximum overall compliance schedule period is two (2) years

- Not later than fourteen (14) days following each milestone date in the approved compliance schedule and the final date for compliance, the Approval holder shall ensure a progress report is submitted to CTRC including, at a minimum, whether or not it complied with the increment of progress to be met on such date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay, and the steps being taken to return the project to the schedule established, and
- If CTRC approves a compliance schedule, the Trade Waste Approval shall be modified to be consistent with agreed trade waste conditions within the compliance schedule period.

During this process, CTRC will continue to monitor the trade waste discharge for ongoing compliance purposes and discharge impacts (e.g. odour or contaminant accumulation) respectively. CTRC will cover costs of routine audit sampling only.

CTRC will only proceed with the cost recovery processes detailed in section 7.9 for Level 1 Trade Waste Non-Compliance Notices where breach events cause:

- Physical damage to CTRC's sewerage infrastructure
- Excessive odour generation within CTRC's sewerage infrastructure, or
- Accumulation of contaminants in CTRC's sewerage infrastructure that must be purposely removed or treated by CTRC.

7.6.2 Level 2 Trade Waste Non-Compliance Notice

If the Approval holder does not come into compliance within the timeframe stipulated in a Level 1 Trade Waste Non-Compliance Notice or a milestone date in an approved compliance schedule, CTRC may serve upon the Approval holder a written Level 2 Trade Waste Non-Compliance Notice.

The Level 2 Trade Waste Non-Compliance Notice will request the approval holder to:

- Take immediate action to come into compliance within a specified time period
- State in writing to CTRC the reasons why the Level 1 Trade Waste Non-Compliance Notice was not followed - within a specified time period not to exceed fourteen (14) days
- Attend a meeting with CTRC Officers to discuss the breach event (if required), and
- Review its Trade Waste Management System and report to CTRC within a specified period.

During this process, CTRC will continue to monitor the trade waste discharge and CTRC's sewerage infrastructure for ongoing compliance purposes and discharge impacts respectively. CTRC will cover costs of routine audit sampling only.

If the trade waste discharge is considered compliant after the compliance date stated in the Level 2 Trade Waste Non-Compliance Notice, the Approval holder may be:

- Invoiced an amount that meets CTRC's costs incurred in the management of the non-compliance event (i.e. administration fees and inspection, sampling and sample analysis costs) and any costs incurred in relation to the reinstatement of any damaged CTRC infrastructure or removal of contaminants from the CTRC's sewerage infrastructure, and the Approval holder agrees that the invoiced amount will be a debt due and payable on demand to CTRC, and
- Notified that no further action will be taken by CTRC regarding this non-compliance event.

7.6.3 Level 3 Trade Waste Show Cause Notice

If compliance is not achieved within the timeframe stipulated by CTRC in a previous Trade Waste Non-Compliance Notice, if CTRC deems a breach by the Approval holder to be a serious or willful breach or CTRC considers it necessary to do so, CTRC may serve a written Level 3 Trade Waste Show Cause Notice.

Non-compliance with a Level 3 Trade Waste Show Cause Notice may lead to suspension or cancellation of a Trade Waste Approval, as per the *WS Act* (see section 7.8).

Additionally, the trade waste drainage sewerage connection point may be sealed immediately by CTRC if the trade waste discharge continues and causes interference or pass-through at a STP.

7.7 Temporary Cessation Of Discharge Notice

CTRC may serve upon an Approval holder a written temporary cessation of discharge notice requiring the Approval holder to temporarily stop discharging trade waste into its sewerage infrastructure, either:

- Immediately, or
- From a time specified in the Notice.

CTRC may give a Notice under this section if CTRC intends to examine, alter, repair, maintain or close down a sewer receiving trade waste. In an emergency situation, notice may be given by telephone to the Approval holder or an occupier, followed by written confirmation. The Approval holder must ensure the discharge of trade waste has ceased within the time specified in the notice. The trade waste discharge must not recommence until CTRC notifies the Approval holder in writing that it may do so.

A temporary cessation of discharge notice does not constitute a suspension of a Trade Waste Approval under the *WS Act*.

7.8 To Suspend Or Cancel A Trade Waste Approval

CTRC has the right to suspend or cancel a Trade Waste Approval in certain circumstances. The process for the suspension or cancellation of a Trade Waste Approval is detailed in sections 182-184 of the *WS Act*.

7.8.1 Suspension or Cancellation Generally

CTRC may suspend or cancel a Trade Waste Approval under section 182 of the *WS Act* in the following circumstances:

- The Approval holder has contravened a condition of the Approval; or
- The Approval holder has contravened a provision of the *WS Act*; or
- The Approval is no longer appropriate because the circumstances under which trade wastes are generated by the holder have significantly changed since the Approval was given, or
- Urgent action is necessary in the interests of public health or safety to prevent environmental harm or prevent damage to the CTRC's sewerage system.

Before suspending or cancelling a Trade Waste Approval, CTRC will issue a Show Cause Notice to the approval holder and provide the latter with an opportunity to make submissions.

The Approval holder shall remain liable to pay all trade waste charges prior to any period of suspension and during any period of suspension stated in the prescribed Information Notice issued to the approval holder. A suspension will take effect in accordance with section 183.

If a Trade Waste Approval is cancelled under section 183 of the *WS Act*, the approval holder shall be liable to pay all trade waste charges up until that date the termination takes effect. Upon termination, the Approval holder must ensure that any pretreatment infrastructure is serviced, cleaned and sealed as soon as reasonably practicable after the last day of trade waste generation on the premises.

7.8.2 Suspension of a Trade Waste Approval where Urgent Action is Necessary

CTRC may suspend a Trade Waste Approval without giving a Show Cause Notice under section 184 of the *WS Act* where urgent action is required to prevent or minimise damage to Charters Towers Regional Council's sewerage infrastructure, its receiving stream, or endangerment to any individuals.

An Approval holder notified in writing of a suspension of the Trade Waste Approval under section 184 of the *WS Act* must ensure the immediate cessation of trade waste discharge from the nominated premises either from the date the Trade Waste Approval holder receives the Information Notice or the date and time stated in the Information Notice – whichever is earlier.

The Approval holder must ensure any Occupier of the nominated premises is aware of the information notice and ceases trade waste discharge in accordance with the information notice. If trade waste is found to have been discharged after the issue of the information notice of suspension or the trade waste notice, CTRC may take such steps as it considers necessary, including, for example, serving such notice on the occupier and immediate severance of the sewerage connection to prevent or minimise damage to Charters Towers Regional Council's sewerage infrastructure, its receiving stream, or endangerment to any individuals.

CTRC may allow the Approval holder of the nominated premises to recommence trade waste discharge from the nominated premises when CTRC considers, at its sole discretion, that urgent action is no longer necessary.

If a Trade Waste Approval is cancelled under section 184 of the *WS Act*, the approval holder shall be liable to pay all trade waste charges up until that date the termination takes effect. Upon termination, the Approval holder must ensure that any pretreatment infrastructure is serviced, cleaned and sealed as soon as reasonably practicable after the last day of trade waste generation on the premises.

7.9 To Recover Costs

In addition to section 7.6.2, when CTRC finds that trade waste was or is being discharged in breach of any provision of a Trade Waste Approval Condition or order issued herein, CTRC may impose an additional trade waste charge for:

- Trade waste quantity and quality
- Additional trade waste inspections, wastewater sampling and analysis
- Removing excess contaminants from CTRC's sewerage infrastructure
- Non-routine cleaning or maintenance of CTRC's sewerage infrastructure
- Preparing administrative enforcement remedies detailed previously in this section, and
- Any other associated task reasonably undertaken by CTRC to determine whether or not damage referred to in this section has been caused by trade waste discharged from the Approval holder's premises or to restore CTRC's sewerage infrastructure to a reasonable state for continued service to the community.

This section applies in respect of damage that occurs or is discovered during the term of a Trade Waste Approval or after it expires.

Any additional trade waste charges shall:

- Be assessed on a non-compliance or breach event basis, and
- Be subject to collection in the same manner as all other trade waste fees and charges.

Any additional trade waste charge levied under this section is a debt due and payable on demand to CTRC. Issuance of an additional trade waste charge shall not be a bar against, or a prerequisite for, taking any other action against the Approval Holder.

8 FEES AND CHARGES

8.1 Trade Waste Application Fee

A fee is charged for the processing of new Trade Waste Applications. This fee, which is set annually in the CTRC Fees and Charges, will be charged prior to the assessment of the new approval.

8.2 Trade Waste Charging Framework

Fees and charges to be levied for each financial year will be determined by CTRC and passed by CTRC elected members' via Resolution in the preceding financial year.

8.3 Trade Waste Billing Categories

Approval holders are assigned to a trade category for charging purposes (refer to Table 4 Trade Waste Customer Billing Categories). Trade waste categories link similar business types to equitable charges and relevant methods for measuring or estimating volume and strength of discharge.

Since individual sampling and analysis of small to medium trade waste discharges would usually exceed the value of the waste discharged, approvals for these discharges are allocated to categories where trade waste volume (Category A) or trade waste quality (Categories B and C) are deemed.

The trade waste from Category C Approval holders is always metered, sampled and chemically analysed to provide a basis for quality charging.

Table 4 Trade Waste Customer Billing Categories

Category A	
Business Type	Minor food service or hospitality activities, care facilities with high residential character, premises with low volume difficult to measure trade waste discharges and no water meter.
Wastewater Description	Minor discharge volume, difficult to measure but assumed to be less than 65 kL/quarter. Deemed domestic strength.
Category B	
Business Type	Small to medium traders, motor vehicle workshops, commercial laundries and other business with similar characteristics, café, restaurant, takeaway, hospitality and catering, pubs, taverns, bars and clubs as well as food or beverage business.
Wastewater Description	Deemed domestic strength: - • BOD_5: 300 mg/L • Suspended Solids: 330 mg/L • Nitrogen: 70 mg/L (as Total Kjeldahl Nitrogen) • Phosphorus: 12 mg/L (as Total Phosphorus)
Category C*	
Business Type	Cooling tower discharges, low impact manufacturing, metal finishers and other businesses with similar characteristics, brewery, cannery, abattoir, food and chemical processor, significant manufacturing or industrial activity and other businesses with similar characteristics.
Wastewater Description	Deemed less than half domestic strength: - • BOD_5: 100 mg/L • Suspended Solids: 200 mg/L • Nitrogen: 13 mg/L (as Total Kjeldahl Nitrogen) • Phosphorus: 10 mg/L (as Total Phosphorus)

*Subject to CTRC's sole discretion, Cat C applies to any approval where specific conditions allow a contaminant to be discharged above the sewer acceptance criteria.

8.4 Trade Waste Accounts – General

8.4.1 Billing Periods for Accounts

Approval holders are charged a minimum trade waste fee for each calendar year period. This charge is based on the discharge of a minimum standard quality of trade waste to CTRC's sewerage infrastructure. Approval holders whose trade waste quantity is large enough, such that their trade waste account is calculated to be in excess of the minimum charge amount, will be charged at the appropriate charge rate in accordance with their trade waste customer category. Typical customer billing periods (i.e. the frequency of billing) vary according to customer category (see Table 5).

Table 5 Typical Trade Waste Customer Billing Periods

Category	Quality Account
Category A- C	Annually 1 July

8.5 Special Disposal Of Trade Waste

In accordance with section 3.4.3, CTRC will issue a specific account for the agreed provision of requested services.

8.6 Inspection And Analysis Fees

Trade waste charges for all categories of waste include provision for routine inspections, auditing and analysis by Trade Waste Officers. Where additional inspections and laboratory analyses are required because of non-compliance with Trade Waste Approval Conditions, or when CTRC is requested by an Approval holder to provide such a service, full costs may be recovered from the Approval holder as a sundry debt.

The cost of inspections shall be based on the charge out rate for the relevant CTRC staff involved and will include time spent on site and travelling to and from the site.

9 RECORDS AND TRADE WASTE INFORMATION

9.1 Record Keeping

CTRC will maintain records of trade waste data, management documents and customer correspondence within its corporate record keeping systems as follows (at a minimum):

Table 6 Record Keeping Locations

Record System	Record Type
ECM (Corporate Records System)	Applicant's completed Trade Waste Application Form
	Customer correspondence
	Signed Trade Waste Approval
	Notifications (of breaches, events and particulars)
	Trade waste self-monitoring data
	Trade waste effluent improvement reports
	Compliance and enforcement letters and notices

All records shall be archived in accordance with the requirements of the *Public Records Act 2002*. All records will be held in accordance with the *Information Privacy Act 2009.*

9.2 Confidentiality

CTRC operates and maintains a Liquid Waste Information System for the purpose of administering CTRC's trade waste business. This database contains commercial-in-confidence information relating to Trade Waste Approval holders and Occupiers.

Information and data relating to a specific person, obtained from reports, surveys, Trade Waste Approval Applications, Trade Waste Approvals, any monitoring programs, and from CTRC's inspection and sampling activities, shall not be available to the public and are treated by CTRC as commercial-in-confidence information.

Requests for specific trade waste information must be made in writing to CTRC and may be required to be referred to the relevant Approval holder.

10 EFFECTIVE DATE, IMPLEMENTATION AND REVISION

1. This TWEMP is effective from 1st of July 2020
2. CTRC will begin communicating the content of this TWEMP from May 2020 and it will be implemented from May 2020 in accordance with the requirements of the *WS Act*.
3. Unless specifically advised otherwise by CTRC, existing Approval holders must come into compliance with this TWEMP in accordance with the timelines and requirements described in section 3.1 Ensuring compliance with TWEMP and Trade Waste Approval.
4. This TWEMP is subject to regular review. The next revision will be released on 1 July 2025, or earlier if circumstances require it.
5. CTRC reserves the right to change to this TWEMP at any time, without prior notice. If any changes are made, a revised copy of this TWEMP will be posted on CTRC's website immediately.

APPENDIX 1 INTERPRETATION AND DEFINITIONS

- Words importing the singular include the plural and vice versa
- Words importing a gender include other genders
- The use of the singular shall be construed to include the plural and the plural shall include the singular as indicated by the context of its use
- A reference to a person includes corporations, trusts, associations, partnerships, a government authority, and other legal entities, and where necessary, includes successor bodies
- References to writing includes printing, typing, email and other means of representing or reproducing words, figures, drawings or symbols in a visible and tangible form, in English
- References to signature and signing include due execution of a document by a body corporate, corporation or other entity
- References to months mean calendar months
- References to statutes include amending, consolidating or replacing statutes and subordinate legislation and statutory instruments made under them from time to time.
- References to sections of statutes or terms defined in statutes refer to corresponding sections or defined terms in amended, consolidated or replacement statutes
- Headings and tables of contents are used for convenience only and are to be disregarded in the interpretation of this TWEMP
- A reference to a clause in this TWEMP is to a clause of this TWEMP
- Where any word or phrase is given a defined meaning, another grammatical form of that word or phrase has a corresponding meaning
- Each paragraph or sub-paragraph in a list is to be read independently from the others in the list
- A reference to this TWEMP or a document is to that TWEMP or document as amended, novated, supplemented or replaced from time to time
- A reference to a party includes that party's executors, administrators, substitutes, successors and permitted assigns and where the party is a natural person their heirs, and
- In interpreting this TWEMP, a construction that would promote the purpose or object underlying the TWEMP must be preferred to a construction that would not promote that purpose or object.

10.1 Definitions

Unless a provision explicitly states otherwise, the following terms and phrases used in this TWEMP and all Trade Waste Approvals shall have the following meanings:

Accessible: Accessible, when applied to required pretreatment monitoring or pretreatment equipment, shall mean direct access without the necessity of removing any panel, door, vehicle, equipment, materials, or other similar obstruction.

Application Date: For a Trade Waste Approval Application, the Application date means:

- if CTRC does not request further information from the Applicant about the Application – the date CTRC received the Application; or
- if CTRC requests further information from the Applicant about the Application – the day CTRC receives the information.

Approval Holder: A person to whom CTRC gives a Trade Waste Approval.

Australian and New Zealand Standard Industrial Classification: The Australian and New Zealand Standard Industrial Classification.

Biochemical Oxygen Demand (BOD_5): The quantity of oxygen used in the biochemical oxidation of organic matter amenable to measurement by the methods described in the latest edition of 'STANDARD METHODS for the Examination of Water and Wastewater'; under standard laboratory procedures for five (5) days at 20°C, usually expressed as a concentration, milligrams per litre (mg/L).

Biosolids: Defined as organic residual material that is produced as a byproduct during sewage treatment.

Chemical Oxygen Demand (COD): A measure of the oxygen consuming capacity of inorganic and organic matter present in wastewater amenable to measurement by the methods described in the latest edition of 'STANDARD METHODS for the Examination of Water and Wastewater'. COD is expressed as the amount of oxygen consumed from a chemical oxidant in mg/L during a specific test.

Composite Sample: The sample resulting from the combination of individual wastewater samples taken at selected intervals based on an increment of either flow or time.

Contaminant: Any solid waste, sewage, refuse, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, fragmented equipment, rock, sand, agricultural waste, industrial wastes, and the characteristics of wastewater i.e., pH, temperature, SS, turbidity, color, BOD, Chemical Oxygen Demand (COD), toxicity, or odour.

Cooling Water: Water used for cooling which does not come into direct contact with any raw material, intermediate product or finished product, including from such uses as air conditioning, heat exchangers, cooling or refrigeration and may contain biological control, scale control and corrosion prevention additives.

Day: Day shall be defined as a calendar day.

Discharge: The introduction of contaminants into Charters Towers Regional Council's sewerage infrastructure from any non-domestic source regulated under section 193 of the *Water Supply (Safety and Reliability) Act 2008.*

Domestic Sewage: Liquid and water borne wastes derived from ordinary living processes, free from trade wastes, and of such character to permit satisfactory disposal, without special pretreatment, into Charters Towers Regional Council's sewerage infrastructure.

EP Act: Environmental Protection Act 1994 (QLD).

Grab Sample: A sample which is taken from a waste stream on a one-time basis without regard to the flow in the waste stream and without consideration of time.

Grease/Silt Arrestor: A remotely located trade waste pretreatment device designed and installed so as to separate and retain deleterious or undesirable matter, such as grease, fat and silt, from trade wastes and permit less polluted trade wastes to discharge by gravity into CTRC's sewerage infrastructure.

Interceptor: An interceptor is a device designed and installed so as to separate and retain deleterious or undesirable matter from trade wastes and permit less polluted trade wastes to discharge by gravity into CTRC's sewerage infrastructure.

Interference: Interference includes, for example, a discharge which alone or in conjunction with a discharge or discharges from other sources, either:

- Inhibits or disrupts CTRC sewerage system, its treatment processes or operations
- Inhibits or disrupts its effluent and/or bio solids reuse or disposal programs or options; or
- Causes a violation of either a CTRC environmental authority condition or other current or future statutory or regulatory provisions or both.

Maximum Allowable Discharge Limit: The maximum concentration expressed in mg/L or maximum load expressed in kg/day of a contaminant allowed to be discharged at any time or over a set period.

Medical Wastes: Solid medical material such as syringes, hypodermic needles, other sharps, bandages, dressings, body parts, contaminated bedding and surgical wastes, isolation wastes, infectious agents and pathological wastes.

New Source: A property location/premises with any Building, structure, facility, installation or infrastructure from which there is proposed to be a discharge of trade waste into CTRC's sewerage infrastructure provided that:

- the building, structure, facility, installation or infrastructure is constructed on land at which no other trade waste source is located; or
- the building, structure, facility, installation or infrastructure totally replaces the process or production equipment (i.e., new waste generating process) that currently discharges trade waste; or
- trade waste is discharged into CTRC's sewerage infrastructure from a different person from such building, structure, facility, installation or infrastructure totally independently to trade waste discharged from an existing Approval holder on such land.

Nominated Premises: The premises nominated or specified in a Trade Waste Approval given by CTRC from which trade waste may be discharged into CTRC's infrastructure.

Occupier: The Occupier means the person in actual occupation of the nominated premises, and includes a Lessee or Licensee under the *Land Act 1994* or Tenant of the nominated premises, or, if there is no person in actual Occupation, the person entitled to possession of the nominated premises.

Oil/Silt Arrestor: A remotely located Trade Waste Pretreatment Device designed and installed so as to separate and retain deleterious or undesirable matter, such as mineral oils, hydrocarbons and silt, from trade wastes and permit less polluted trade wastes to discharge by gravity into Charters Towers Regional Council's sewerage infrastructure.

Owner: Any of the following:

- a registered proprietor of land
- a body corporate under the *Body Corporate and Community Management Act 1997 (QLD).*

Pass Through: A pass through event is an event whereby a contaminant:

- because of its quantity and/or concentration cannot be adequately treated at a STP;
- because of its refractory nature prevent another contaminant being adequately treated; or
- causes a contaminant to pass through the plant into local waters within CTRC's service area in a quantity and/or concentration that causes a breach of an environmental authority issued by DES.

Person: Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity, or its legal representatives, agents, successors or assigns.

pH: A measure of the acidity or alkalinity of a substance, expressed in standard units.

Premises: Includes land, buildings and infrastructure from which trade waste is discharged.

Pretreatment: The reduction of the amount of contaminants, the elimination of contaminants, or the alteration of the nature of contaminant properties in trade waste prior to (or in lieu of) introducing such contaminants into CTRC's sewerage infrastructure. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means (except by diluting the concentration of contaminants with water (potable or stormwater)).

Pretreatment Requirements: Any substantive or procedural requirement related to pretreatment imposed on an approval holder, other than Trade Waste Sewer Acceptance Criteria.

Prohibited Substance: A substance prescribed in Schedule 1 of the *WS Act*.

Regulated Waste: Regulated waste, under the *EP Act*, means a waste that:

- Contains a significant quantity and concentration of a hazardous contaminant
- The hazardous contaminant exhibits hazardous characteristics because of its toxicity, carcinogenicity, mutagenicity, teratogenicity, flammability, corrosiveness, reactivity, ignitability or infectiousness, through its physical, chemical or biological characteristics; or
- May cause environmental harm if improperly transported, treated, stored, disposed, or otherwise.

Residual Waste: Materials which still require disposal after the completion of a treatment process, destruction process or resource recovery activity.

Septic Tank Waste: Any domestic and/or residential sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.

Sewage: Liquid and water-carried trade wastes and domestic sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are discharged to CTRC's sewerage infrastructure.

Sewer: Any pipe (other than a sanitary plumbing, soil pipe or waste pipe) used for carrying sewage from premises.

Sewer Acceptance Criteria: A suite of standards that details the maximum level of contaminants (concentration and/or mass based) allowable in a trade waste to be suitable for discharge to CTRC's sewerage infrastructure.

Sewerage Infrastructure: Infrastructure used to receive, transport and treat sewage and/or trade waste and consisting of some or all of the following - sewers, access chambers, vents, engines, pumps, structures, machinery, outfalls, and other works not mentioned forthwith.

Sewerage Treatment Plant (STP): That portion of CTRC's sewerage infrastructure designed to provide treatment of wastewater.

Sewerage Treatment Plant (STP) Effluent: The discharge from a CTRC operated STP, either:

- Into local and surrounding waters of the CTRC service area; or
- Supplied to a person for re-use under the terms and conditions of a contract or an approval.

Shock Load: Any discharge of a non-routine, episodic nature, including but not limited to, an accidental spill or a non-customary batch discharge, or any discharge greater than or equal to five (5) times the amount or concentration allowed by a Trade Waste Approval or this Trade Waste Environmental Management Plan.

Stormwater: Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation.

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

Sullage: Sediment deposited by running water, filth or refuse.

Suspended Solids (SS): The total suspended matter that floats on the surface of, or is suspended in, water, trade waste, or other liquid, and which is removable by laboratory filtering and is amenable to measurement by the methods described in the latest edition of 'STANDARD METHODS for the Examination of Water and Wastewater'.

Total Oils and Grease (TOG): Those components of trade waste amenable to measurement by the methods described in the latest edition of 'STANDARD METHODS for the Examination of Water and Wastewater' APHA-AWWA-WEF, including polar and non polar fats, oils, and grease and other components extracted from wastewater at pH 7.5 by these methods.

Trade Waste: Water-borne waste from business, trade, or manufacturing premises, other than:

- Waste that is a prohibited substance;
- Human waste; or
- Stormwater.

Trade Waste Approval: A Trade Waste Control Document issued by CTRC allowing the discharge of trade waste into Charters Towers Regional Council's sewerage infrastructure.

Trade Waste Consent: A Trade Waste Control Document issued by CTRC on request from an Applicant under circumstances where complex or non-standard Trade Waste Conditions are requested.

Trade Waste Officer: A person holding appointment as a Trade Waste Officer of CTRC under the *LG Act*.

Wastewater: Sewage

WS Act: Water Supply (Safety and Reliability) Act 2008 (Qld).

10.2 Acronyms

The following abbreviations shall have the designated meanings:

ANZSIC	Australian and New Zealand Standard Industrial Classification
ANZECC	Australian and New Zealand Environment and Conservation Council
ARMCANZ	Agriculture and Resource Management Council of Australia and New Zealand
APHA	American Public Health Association
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
COD	Chemical Oxygen Demand
CPI	Coalescing Plate Interceptor
CTRC	Charters Towers Regional Council
DES	Department of Environment and Science
kL	Kilolitre
L	Litre
LEL	Lower Explosive Limit
LIWIS	Liquid Waste Information System
LG Act	*Local Government Act 2009*
MPD	Megalitres per day
mg	Milligrams
mg/L	Milligrams per litre
OGTR	Office of the Gene Technology Regulator
P.U.R.E	Photographic Uniform Regulations for the Environment
SAC	Sewer Acceptance Criteria
STP	Sewerage Treatment Plant

SS	Suspended Solids
TKN	Total Kjeldahl Nitrogen
TP	Total Phosphorous
TOG	Total Oils and Grease
TWEMP	Trade Waste Environmental Management Plan
WS Act	*Water Supply (Safety and Reliability) Act 2008*
WPCF	Water Pollution Control Federation
WRP	Waste Receival Point
WSAA	Water Services Association of Australia

APPENDIX 2 TRADE WASTE SEWER ACCEPTANCE CRITERIA

A2.1 PURPOSE AND SCOPE

These Trade Waste Sewer Acceptance Criteria define the quality standards for trade waste approved for discharge into sewerage infrastructure owned by CTRC.

Site-specific variations to the Trade Waste Sewer Acceptance criteria may be approved at CTRC's sole discretion and such variations will be documented in Trade Waste Approval Conditions.

These Trade Waste Sewer Acceptance Criteria conform to the Australian Sewage Quality Management Guideline 2012 (WSAA) and the requirements of the *WS Act.*

A2.2 PROHIBITED SUBSTANCES

No person, whether the person is an Approval holder or not, shall introduce or cause to be introduced into CTRC's sewerage infrastructure prohibited substances listed in Trade Waste Sewer Acceptance Criteria.

Prohibited substances are detailed in Schedule 1 of the *WS Act*, and include:

1. A solid or viscous substance in a quantity, or of a size, that can obstruct sewage, or interfere with the operation of sewerage.

   Specifically including solid or viscous substances in amounts which will cause obstruction of the flow in Charters Towers Regional Council's sewerage infrastructure resulting in interference; but in no case solids with a maximum linear dimension of greater than 13 millimetres and a quiescent settling velocity greater than 3 metres per hour.

   Examples include:

Animal guts or tissues	Paunch manure	Bones	Hair	Entrails	Whole blood	Feathers	Ashes
Cinders	*Flushable* kitty litter	*Flushable* wet wipes	Sand	Spent lime	Stone	Marble dusts	Sawdust
Metal	Glass	Straw	Grass clippings	Rags	Spent grains	Waste paper	Wood and Plastic

2. A flammable or explosive solid, liquid or gaseous substance, including petrol.
   Contaminants which create a fire or explosive hazard in sewerage infrastructure including, but not limited to, waste streams with a closed-cup flashpoint of less than 60°C.

3. Floodwater, rainwater, roof water, storm water, subsoil water and surface water.

Note:
- where stormwater is collected and used in substitute for potable water and then used to generate trade waste, the wastewater will no longer be considered to be stormwater or groundwater.
- Where such water has been modified by commercial activities or trade, CTRC will regard the water as trade waste and use its discretion whether to accept the wastewater to sewer (i.e., landfill leachate).

4. A substance, that given its quantity, is capable alone, or by interaction with another substance discharged into sewerage, of:
   - inhibiting or interfering with a sewage treatment process; or
   - causing damage or a hazard to sewerage; or
   - causing a hazard for humans or animals; or
   - creating a public nuisance; or
   - creating a hazard in waters into which it is discharged; or
   - contaminating the environment in places where effluent or sludge from a sewage treatment plant is discharged or reused.

Note:

- Noxious or malodorous liquids, gases, solids, or other wastewater.
- Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference (i.e., accumulation in a pump station wet well) or pass through.
- Alkaline degreasers or other products intended for the use of solubilising or emulsifying oil, grease and fat residues.
- Raw or depleted degreasing substances or baths of detergent cleaners, hydrocarbon cleansers, caustic soda, phenol/cresol solutions, cresylic acid and chlorinated hydrocarbons.
- Contaminants which result in the release of toxic gases, vapours, or fumes within sewerage infrastructure in a quantity that may cause worker health and safety problems.
- Any sludge, screenings, or other residual wastes from the pretreatment of industrial or commercial wastes or from industrial or commercial processes, unless such wastes have undergone pretreatment and have been approved for discharge by Charters Towers Regional Council.

5. A substance at a temperature of more than 38°C.

A2.3 RESTRICTED SUBSTANCES

No person, whether the person is an Approval holder or not, shall introduce or cause to be introduced into CTRC's sewerage infrastructure any restricted substance at concentration or mass load greater than the relevant Sewer Acceptance Criteria listed in the tables below.

Any substance not listed in the Sewer Acceptance Criteria is a restricted discharge and must not be discharged at measurable concentrations unless specifically approved by CTRC.

Parameter	Remarks
Medical and infectious wastes	Pathological, infectious and cytotoxic wastes are prohibited except as allowed for under the *National Guidelines for the Management of Clinical and Related Wastes* produced by the National Health and Medical Research Council (Australia). No person shall discharge solid wastes from any hospital, clinic, surgery, laboratory or any other medical or veterinary facility to the sewers including but not limited to hypodermic needles, syringes, instruments, utensils, swabs, dressings, bandages, paper and plastic items of a disposable nature and any noticeable portion of human or animal anatomy. No unwanted, unused or expired pharmaceuticals shall be disposed of to the sewerage system, except in accordance with federal and state regulations
Genetically engineered organisms	Dischargers must notify and obtain the written permission of CTRC prior to the discharge of genetically engineered organisms. CTRC, if not already in receipt of information from the Office of the Gene Technology Regulator (OGTR) about this application will refer the application to OGTR for comment. OGTR has issued guidelines on the disposal of genetically engineered organisms. For further information contact: Office of the Gene Technology Regulator MDP54 GPO Box 9848 Canberra ACT 2601 Email: ogtr@health.gov.au Phone: 1800 181 030 Fax: (02) 6271 4202
Halogenated Aromatic Hydrocarbons (PCBs and PBBs)	Because of their stability, persistence and ability to bioaccumulate in animal tissue, these compounds have been severely restricted by health and environmental regulators. The discharge must be less than the limit of detection.

Parameter	Remarks
Pesticides – organochlorine	Because of their stability, persistence and ability to bioaccumulate in animal tissue, these compounds have been severely restricted by health and environmental regulators. The discharge must be less than the limit of detection.
Radioactive material	Radioactive material discharged to sewer must comply with requirements and discharge standards specified in the *Radiation Safety Act 1999* and associated regulations as updated from time to time.
Other substances	Other substances to be controlled in discharges to sewer are those which: • Are persistent and/or toxic • Pass through a treatment plant untreated or partially treated and affect the receiving environment • Are deleterious to the sewerage system, employees of CTRC and/or the public • Inhibit process efficiency or make collection and treatment of wastewater more expensive • Could lead to contamination of the wastewater treatment products.

A2.4 GENERAL ACCEPTANCE LIMITS

Parameter	Maximum Limit	Remarks
Ammonia plus ammonia ion (measured as N)	150 mg/L	High ammonia: • May adversely affect the safety of operations and maintenance personnel • May significantly contribute to the nutrient load discharged into the receiving environment. Higher values may be allowed subject to local pH and temperature conditions.
Biochemical Oxygen Demand (BOD_5)	1000 mg/L	When required, a specific BOD_5 mass load limit in kilograms per day will be applied as a Trade Waste Approval Condition.
Boron (as B)	100 mg/L	Boron is not removed by conventional treatment. High concentrations in effluent may restrict reuse/recycling applications.
Bromine (Br_2)	10 mg/L	High concentrations may adversely affect the safety of operations and maintenance personnel.
Chemical Oxygen Demand (COD)	2000 mg/L	When required, a specific COD mass load limit in kilograms per day will be applied as a Trade Waste Approval Condition.
Chlorine (Cl_2)	10 mg/L	Chlorine can: • Adversely affect the safety of operations and maintenance personnel • Cause corrosion of sewer structures; and • Inhibit treatment processes.

Parameter	Maximum Limit	Remarks
Colour	Colour not noticeable after 100 times dilution	Colour may cause: • Aesthetic impairment of receiving water; and • Adverse effects on disinfection processes. Where potential for such problems exists, a level of colour which is rendered unnoticeable after the predicted dilution is desirable. Biodegradability of the colour may be an important factor where secondary treatment is used.
Cyanide – weak acid dissociable (as CN)	5 mg/L	Cyanide may produce toxic atmospheres in the sewer and adversely affect the safety of operations and maintenance personnel.
Fluoride (as F)	30 mg/L	Fluoride is not removed by conventional treatment, however pretreatment can easily and economically reduce concentrations to below 30 mg/L.
Grease and oil (total)	200 mg/L	Grease and oil: • Can cause sewer blockages • May adversely affect the treatment processes; and • May impair the aesthetics of the receiving water.
pH	Minimum: 6 Maximum: 10.5	Extremes of pH: • Can adversely affect biological treatment processes • Can adversely affect the safety of operations and maintenance personnel • Cause corrosion of sewer structures • Increase the potential for the release of toxic gases such as H_2S and HCN.
Salts – Total Dissolved (TDS)	2000 mg/L	Saline receiving waters Inland STPs with low salinity receiving waters. Contact CTRC for details. High TDS reduces effluent options and may contribute to soil salinity.
Solids – gross	13mm (max linear dimension) 3 m/hr QSV	Gross solids can cause sewer blockages. Non-faecal gross solids shall have a maximum linear dimension of less than 13mm and quiescent settling velocity of less than 3 m/hr.
Solids – Suspended (SS)	500 mg/L	High suspended solids can: • Cause sewer blockages • Overload the treatment process. When required, a specific SS mass load limit in kilograms per day will be applied as a Trade Waste Approval Condition.

Parameter	Maximum Limit	Remarks
Sulphate (measured as SO_4)	2000 mg/L	Sulphate: • Discharge may be limited by TDS constraint in some catchments • May increase the potential for the generation of sulphides in the waste water • May adversely affect sewer structures.
Sulphide – dissolved (as S^{2-})	1 mg/L	Dissolved sulphides in wastewater may: • Cause corrosion of sewer structures • Generate odours in sewers which could cause public nuisance • Result in sewer gases which adversely affect the safety of operations and maintenance personnel.
Sulphite (as SO_2)	100 mg/L	Sulphite is a strong reducing agent and removes dissolved oxygen thereby increasing the potential for anaerobic conditions to form in the wastewater. In particular, values will need to be set on a case by case basis if the discharge is to a sewer receiving dosed oxygen by injection for odour and corrosion mitigation. Higher values may be allowed subject to local pH and temperature conditions. Sulphite also has the potential to release SO_2 gas and thus adversely affect the safety of operations and maintenance personnel.
Temperature	<38°C	Higher sewage temperatures: • Cause increased damage to sewer structures • Increase the potential for anaerobic conditions to form in the waste water • Promote the release of gases such as H_2S and NH_3 • Can adversely affect the safety of operations and maintenance personnel.
Total Organic Carbon (TOC)	2000 mg/L	When required, a specific mass load limit in kilograms per day will be applied as a Trade Waste Approval condition.
Total Nitrogen (TN)	150 mg/L	High Kjeldahl nitrogen may significantly contribute to the nutrient load discharged to the receiving environment.
Total Phosphorous (as P)	20 mg/L	High phosphorus may significantly contribute to the nutrient loading discharged to the receiving environment.

A2.5 SPECIFIC ACCEPTANCE LIMITS FOR METALS

CTRC has elected to apply mass load criteria rather than concentration limits for small volume and very large waste generators.

For discharges with a daily mass load below the stated Upper Daily Mass Load (UDML), no concentration limit applies (see table below). This approach recognises that the small amounts involved will have a minimal impact. Where a trade waste generator exceeds the lower daily mass load, the discharge must not exceed the concentration limits shown. This may require pretreatment to be applied by the generator.

Dischargers that produce untreated wastes with a daily mass load above the catchment-specific Upper Daily Mass Load (UDML) must pretreat their wastes to a concentration such that the daily mass load, finally discharged, is less than the UDML.

The value of the UDML is dependent on the load on the treatment plant and is therefore a site-specific value. For current UDML information, contact CTRC on (07) 4761 5300.

Parameter	**Upper Daily Mass Load (UDML)**	**Concentration Limits** **To be confirmed after future testing at CTRC sewerage treatment plant**
Aluminium (Al)	50 g/day	10 mg/L
Arsenic (As)	5 g/day	0.5 mg/L
Cadmium (Cd)	0.5 g/day	0.2 mg/L
Chromium (Cr)* Total Hexavalent	 0.50 g/day 0.0025 g/day	 2.0 mg/L 1.0 mg/L
Cobalt (Co)	3.0 g/day	1.0 mg/L
Copper (Cu)	5.0 g/day	1.0 mg/L
Iron (Fe)	5.0 g/day	10.0 mg/L
Lead (Pb)	10 g/day	1.0 mg/L
Manganese (Mn)	50 g/day	10.0 mg/L
Mercury (Hg)	0.01 g/day	0.01 mg/L
Molybdenum (Mo)	0.5 g/day	1.0 mg/L
Nickel (Ni)	3.0 g/day	1.0 mg/L
Selenium (Se)	0.02 g/day	0.5 mg/L
Silver (Ag)	5 g/day	0.5 mg/L
Tin (Sn)	30 g/day	1.0 mg/L
Zinc (Zn)	20 g/day	1.0 mg/L
*CTRC requires the waste generator to reduce hexavalent chromium to trivalent chromium.		

A2.6 SPECIFIC ACCEPTANCE LIMITS FOR ORGANIC COMPOUNDS

Parameter	Maximum Limit	Remarks
Aldehydes		Aldehydes in the sewer atmosphere can adversely affect the safety of operations and maintenance personnel.
Formaldehyde (as HCHO)	3.0 mg/L	
Acetaldehyde (as CH_3CHO)	0.5 mg/L	
Propionaldehyde (as CH_3CH_2CH0)	0.5 mg/L	
Dimethyl sulphide	0.1 mg/L	Dimethyl sulphide is flammable and an irritant. Dimethyl sulphide has an unpleasant odour at even extremely low concentrations.
Butyl Carbitol	100.0 mg/L	Not greater than 0.2 mg/L at STP influent
Ketones		Ketones in the sewer atmosphere can adversely affect the safety of operations and maintenance personnel.
Acetone	4.0 mg/L	
Methyl ethyl ketone	1.0 mg/L	
Pesticides – total (includes insecticides, herbicides, fungicides)	1.0 mg/L	This category covers all pesticides other than those that are specifically listed below. They may: • Adversely affect the treatment processes • Impair the quality of the receiving environment • Adversely affect the safety of operations and maintenance personnel • Restrict reuse/recycling applications.
Pesticides – organophosphor-ous (total) Per and poly-fluoro alkl substances (PFAS)	0.1 mg/L 0.0002 mg/L	All discharges must be assessed and approved by CTRC in accordance with the QUU PFAS Source Control Management Plan.
Petroleum hydrocarbons		Petroleum hydrocarbons may adversely affect the safety of operations and maintenance personnel.
Total	30.0 mg/L	
C_6 – C_9	0.5 mg/L	
Benzene	0.004 mg/L	
Toluene	0.05 mg/L	
Ethyl benzene	0.1 mg/L	
Xylene (total)	0.1 mg/L	
Phenolic compounds		Phenolic compounds may adversely affect biological treatment processes. They may not be completely removed by conventional treatment and subsequently may impact on the receiving environment.
Total Phenols	1.0 mg/L	

Parameter	Maximum Limit	Remarks
Pentachlorophenol	0.5 mg/L	Pentachlorophenol: • Can adversely affect the biological treatment process • May impair the quality of the receiving environment.
Polynuclear Aromatic Hydrocarbons (PAHs)	0.5 mg/L	Many of these substances have been demonstrated to have an adverse effect on the health of animals. Some are also persistent and are not degraded by conventional treatment processes.
Volatile organic compounds		Volatile organic compounds may adversely affect the safety of operations and maintenance personnel.
Halogenated (total)	0.1 mg/L	
Trichloromethane (chloroform)	0.1mg/L	
Tetrachloroethene (perchlorethylene)	0.01mg/L	
Trichloroethene (trichloroethylene)	0.01 mg/L	

APPENDIX 3 PRETREATMENT REQUIRMENTS

A3.1 BASIC PRETREATMENT REQUIREMENTS FOR NOMINATED BUSINESS TYPES

The business types listed below are deemed to comply with sewer acceptance criteria when discharging trade waste through properly installed and maintained pretreatment infrastructure, unless otherwise specified in the relevant Trade Waste Approval. For completeness business types without pretreatment requirements are also shown in this table.

NOTE: All premises involved in food preparation shall have basket traps installed in all sinks and floor wastes.

Business Type	Basic Pre-Treatment Requirements
Workshops	
Automotive industries Service stations, car detailers	Oil silt arrestor.
Mechanical workshop	Oil silt arrestor.
Food service	
Cafe / canteen / cafeteria Cooking on site	Standard grease arrestor sizing and basket traps.
Chicken (fresh) Cutting and preparation of fresh meat	Standard grease arrestor sizing and basket traps.
Chicken cooking (minor retail) BBQ, charcoal, rotisserie	Standard grease arrestor sizing and basket traps.
Chicken cooking (major retail)	Grease arrestor with a capacity greater than the peak hourly flow (L/hour), but minimum 3000L grease arrestor and basket traps.

Business Type	Basic Pre-Treatment Requirements
Direct cooker connection to sewer (i.e. steam Combi oven)	
Coffee shop / sandwich shop / sandwich bar No cooking on site and discharge <1000L/day	Basket traps required.
Coffee shop / sandwich shop / sandwich bar Cooking on site	Standard grease arrestor sizing and basket traps.
Commercial kitchen Hotel, motel, function centre, hospital	Standard grease arrestor sizing. In-sink and floor waste basket traps of self-closing or fixed screen type.
Community hall kitchens Minimal food preparation at site	Basket traps required.
Community hall kitchens Cooking on site	Standard grease arrestor sizing and basket traps.
Doughnut shop Cooking on site	Standard grease arrestor sizing and basket traps.
Fast food outlet (major franchise)	Grease arrestor with a capacity greater than the peak hourly flow (L/hr), but minimum 2000L grease arrestor, and basket traps.
Fish and Chip Shop	Standard grease arrestor sizing and basket traps.
Hotel / motel / bar / nightclub No cooking on site	Basket traps required.
Hotel / motel / bar / nightclub With counter lunches, cooking	Standard grease arrestor sizing In-sink and floor waste basket traps of self-closing or fixed screen type.
Ice cream parlour Without hot takeaway food	Basket traps required.
Ice cream parlour With hot takeaway food	Standard grease arrestor sizing and basket traps.
Pizza shop (not a major chain)	Standard grease arrestor sizing and basket traps.
Restaurant	Standard grease arrestor sizing and basket traps.
School canteen No cooking on site	No pre-treatment required In-sink and floor waste basket traps of self-closing or fixed screen type.
School canteen Cooking on site	Standard grease arrestor sizing In-sink and floor waste basket traps of self-closing or fixed screen type.
School home science / hospitality kitchen	Standard grease arrestor sizing

Business Type	Basic Pre-Treatment Requirements
	In-sink and floor waste basket traps of self-closing or fixed screen type.
Takeaway food shop No food cooked on site (i.e. sandwich bar)	No pre-treatment required In-sink and floor waste basket traps of self-closing or fixed screen type.
Takeaway food shop Cooking on site	Standard grease arrestor sizing In-sink and floor waste basket traps of self-closing or fixed screen type.
Tertiary institution kitchen / canteen / cafeteria	Standard grease arrestor sizing In-sink and floor waste basket traps of self-closing or fixed screen type.
Specialty food	
Bakery (retail) Cooking on site (preparation of pastries, pies, etc)	Standard grease arrestor sizing In-sink and floor waste basket traps of self-closing or fixed screen type.
Butcher (retail)	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Delicatessen No meat or hot food cooked on site	In-sink and floor waste basket traps of self-closing or fixed screen type.
Delicatessen Hot food cooked on site	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Fresh fish (retail) No fish cleaned, filleted or cooked on site	In-sink and floor waste basket traps of self-closing or fixed screen type.
Fresh fish (retail) Fish cleaned, filleted or cooked on site	In-sink and floor waste basket traps of self-closing or fixed screen type.
Food manufacturing/processing	
Food manufacturing – minor (<10 kL/day discharge)	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type
Service industries	
Beautician / hairdressing salon	No pre-treatment required, No discharge through grease arrestor
Laundry Coin operated only (not commercial)	No pre-treatment required
Funeral parlour	No pre-treatment required
Funeral parlour with mortuary	No pre-treatment required

Business Type	Basic Pre-Treatment Requirements
School science laboratory	Authorised silt trap or dilution chamber with a capacity greater than the peak hourly flow (L/hr). Neutralisation chamber may be required.
School art studio / block	Silt arrestor with a capacity greater than the peak hourly flow (L/hr) and basket traps.
Veterinary practice or hydrobath No discharge of regulated waste	Basket trap in discharge being of self-closing or fixed screen type
Care facilities	
Day care centre No cooking on site	Basket traps required.
Day care centre Cooking on site	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Hospital kitchen	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Nursing home kitchen	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Retirement village kitchen	Standard grease arrestor sizing, In-sink and floor waste basket traps of self-closing or fixed screen type.
Commercial process	
Bin wash Associated with commercial premises	Basket trap in floor waste of self-closing or fixed screen type, Wastewater to pass via silt arrestor
Carwash Roofed and bunded	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hr), Basket trap in floor waste of self-closing or fixed screen type.
Cooling tower condensate and blow-down	No pre-treatment required
Boiler blow-down or wastewater	No pre-treatment required
Refrigeration condensate	No pre-treatment required
Compressor condensate Large scale	Oil silt arrestor with a capacity greater than the peak hourly flow (L/hr).

Standard arrestor sizing details are provided in section 4.2 of the TWEMP.

APPENDIX 4 GUIDELINE FOR ESTIMATING PEAK HOURLY FLOW

Fixture/Fitting Type	Peak Hourly Flow Allowance (Litres/hour)
Bain Marie - water heated	Use maximum capacity of the apparatus x 3

Fixture/Fitting Type	Peak Hourly Flow Allowance (Litres/hour)
Bratt Pan	100 L/hr
Floor waste / bucket trap / grated strip drain	50 L/hr for every 50m2 of floor area, or part thereof Add allowance for any listed connected apparatus
Cleaners' sink	50 L/hr
Combi Oven / Steam roasting oven	150L/hr up to 40 racks
Dishwasher - tunnel feed	Use manufacturer's peak flow rate per hour x 3
Dishwasher - large (>1 outlet)	Use manufacturer's peak flow rate per hour x 3
Dishwasher – medium (upright)	300 L/hr
Dishwasher – small (under bench)	30 L/hr
Glass washer - tunnel feed	Use manufacturer's peak flow rate per hour x 3
Glass washing machine	30 L/hr
Grease canopy (water cleaned)	50 L/hr
Hand basin	50 L/hr
Ice cream machine soft serve	60 L/hr
Kettle electric or gas / Steamer cooker	100 L/hr
Laboratory sink (commercial or research lab)	50 L/hr
Laboratory sink (educational facility)	22 L/hr
Noodle cooker	100 L/hr
Potato peeler (large commercial application)	Use manufacturer's peak flow rate per hour x 3
Potato peeler (small kitchen application)	100 L/hr
Rotisserie rack	100 L/hr
Steamer Roast Oven / Combi Oven	1000 L + 40 L/hour per rack 3000 L grease arrestor minimum size for high use Combi ovens (i.e. supermarkets, fast food chains)
Electric or gas /steamer cooker / kettle	200 L/hr
Sink - utility / pot per outlet connected separately to drain (depth greater than 300mm)	300 L/hr
Sink – single bowl (depth up to and including 300mm)	150 L/hr
Sink – double bowl (depth up to and including 300mm fixture pair connection)	300 L/hr
Trough up to 4 taps	40 L/hr
Trough greater than 4 taps	Refer to trade waste section for advice
Tundish- condensate (refrigerator / freezer condensate)	3 L/hr
Tundish- other (except refrigerator condensate)	3 L/hr Add allowance for any listed connected apparatus
Wok burner –dry	20 L/hr per water arm

Fixture/Fitting Type	Peak Hourly Flow Allowance (Litres/hour)
Wok burner –wet	Use manufacturer's peak flow rate per hour x 3

APPENDIX 5 LEGISLATION RELEVANT TO TRADE WASTE

Body Corporate and Community Management Act 1997 (QLD)
Code of Practice for Photographic Waste Liquids
Environmental Protection Act 1994
Environmental Protection Regulation 2019
Environmental Protection (Water and Wetland Biodiversity) Policy 2019
Information Privacy Act 2009
Land Act 1994
Local Government Act 2009
Plumbing and Drainage Act 2018
Plumbing and Drainage Regulation 2019
Public Records Act 2002
Public Health Regulation 2018
Planning Act 2016
Radiation Safety Act 1999
Waste Reduction and Recycling regulation 2011
Water Supply (Safety and Reliability) Act 2008

CHARTERS TOWERS
REGIONAL COUNCIL

STRAT0071/CCS - Trade Waste Environmental Management Plan

Document No. 1306894

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