TRADE WASTE

SEWER ACCEPTANCE CRITERIA

SCHEDULE 2

TABLE OF CONTENTS

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 the Central SEQ Distributor-Retailer Authority (trading as Queensland Urban Utilities).

Site-specific variations to the Trade Waste Sewer Acceptance criteria may be approved at QUU'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 Water Supply (Safety and Reliability) Act 2008.

2 PROHIBITED SUBSTANCES

No person, whether the person is an Approval Holder or not, shall introduce or cause to be introduced into QUU's sewerage infrastructure Prohibited Substances listed in Trade Waste Sewer Acceptance Criteria.

Prohibited Substances are detailed in Schedule 1 of the Water Supply Act, and include:

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

  Note: specifically including:

  - Solid or viscous substances in amounts which will cause obstruction of the flow in QUU'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.
  - Animal guts or tissues, paunch manure, bones, hair, entrails, whole blood, feathers, ashes, cinders, sand, spent lime, stone or marble dusts, sawdust, metal, glass, straw, grass clippings, rags, spent grains, waste paper, wood and plastics.

- **A flammable or explosive solid, liquid or gaseous substance, including petrol.**

  Note: specifically including:

  - 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.

- **Floodwater, Stormwater, roof water, subsoil water and surface water.**

  Note: specifically including:

  - Where Stormwater is collected and used in substitute for potable water and then used to generate trade waste, the waste water will no longer be considered to be Stormwater or groundwater.

- Where such water has been modified by commercial activities or trade, QUU will regard the water as trade waste and use its discretion whether to accept the wastewater to sewer (i.e. landfill leachate)

- **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: specifically including:
  - 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 pre-treatment of industrial or commercial wastes or from industrial or commercial processes, unless such wastes have undergone pre-treatment and have been approved for discharge by QUU.

- **A substance at a temperature of more than 38^{0}C (or as otherwise agreed in writing by QUU)**

3 RESTRICTED SUBSTANCES

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

For trade waste discharge volumes greater than 25kL/day QUU may apply specific Sewer Acceptance Criteria (generally lower than the limits described below and inclusive of mass load conditions).

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 QUU.

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 1988. 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. QUU shall have the authority to require that any discharge of etiologic or infectious agents or substances to the sewerage system be rendered inactive and non-infectious prior to discharge if the waste is deemed to pose a threat public health and safety, or can become an etiologic agent subsequent to discharge to sewer, or will result in any violation of applicable wastewater discharge requirements. No unwanted, unused or expired pharmaceuticals shall be deposed 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 QUU prior to the discharge of genetically engineered organisms. QUU, 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.
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, including section 16 and Schedule 3 of the Radiation Safety Regulation 2010 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 QUU 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.

4 GENERAL ACCEPTANCE LIMITS

Parameter	Maximum Limit	Remarks
Ammonia (as N)	150 mg/L	
Biochemical Oxygen Demand (BOD_5)	1000 mg/L (Mass Load Limit 25 kg/day)	Note Mass Load Limit. Excess discharges may be approved subject to capacity assessment but in such cases the Approval Holder may be required to enter into a Trade Waste Services Agreement that includes annualised access charges.
Boron (as B)	100 mg/L	
Bromine (Br_2)	10 mg/L	
Chemical Oxygen Demand (COD)	2000 mg/L	A specific COD mass load limit in kilograms per day may be applied as a Trade Waste Approval condition.
Chlorine (Cl_2)	10 mg/L	
Colour	Not noticeable after 100 times dilution	
Cyanide – weak acid dissociable (as CN)	5 mg/L	
Fluoride (as F)	30 mg/L	
Oil and Grease (total)	200 mg/L	Does not apply where discharge is deemed compliant due to installation and GOP operation of a properly sized authorised grease arrestor.
pH	Minimum: 6 Maximum: 10.5	
Salts – Total Dissolved (TDS)	5000 mg/L	Applies to saline receiving waters (Brisbane STPs) Inland STPs may have lower limits.
Solids – gross	13mm (max linear dimension), 3 m/hr QSV	Non-faecal gross solids shall have a maximum linear dimension of less than 13mm, a quiescent settling velocity of less than 3 m/hr, and shall not float.
Solids – Suspended (SS)	500 mg/L	
Sulphate (as SO_4)	2000 mg/L	
Sulphide – dissolved (as S^{2-})	1 mg/L	
Sulphite (as SO_2)	100 mg/L	
Temperature	<38°C	
Total Nitrogen (as N)	150 mg/L (Mass Load Limit 3.75 kg/day)	Note mass load and volume limits. Excess discharges may be approved subject to capacity assessment but in such cases the Approval Holder may be required to enter into a Trade Waste Services Agreement that includes annualised access charges.
Total Phosphorous (as P)	20 mg/L (Mass Load Limit 1.25 kg/day)	
Volume (kL/day)	25 kL/day	

Note: QUU may require Approval Holders to meet stricter limits - according to the characteristics of the proposed discharge and the capacity of the relevant sewage catchment.

5 SPECIFIC ACCEPTANCE LIMITS FOR METALS

QUU has elected to apply mass load criteria and concentration limits to the acceptance of trade waste containing metals.

To discuss catchment specific upper mass load limits, contact QUU Trade Waste on (07) 3432 2160 or email trade.waste@urbanutilities.com.au.

Table 1 - Metals Solution Discharge Limits

Parameter	Upper Daily Mass Load (UDML – Luggage Point STP)†	Concentration Limits
Aluminium (Al)	500 g/day	100 mg/L
Arsenic (As)	10 g/day	5 mg/L
Cadmium (Cd)	1.5 g/day	2 mg/L
Chromium (Cr) Total Hexavalent*	 50 g/day 2.5 g/day	 20 mg/L 1 mg/L
Cobalt (Co)	50 g/day	10 mg/L
Copper (Cu)	50 g/day	10 mg/L
Iron (Fe)	500 g/day	100 mg/L
Lead (Pb)	75 g/day	10 mg/L
Manganese (Mn)	500 g/day	100 mg/L
Mercury (Hg)	0.5 g/day	0.05 mg/L
Molybdenum (Mo)	50 g/day	10 mg/L
Nickel (Ni)	30 g/day	10 mg/L
Selenium (Se)	2.5 g/day	5 mg/L
Silver (Ag)	2.5 g/day	5 mg/L
Tin (Sn)	50 g/day	10 mg/L
Zinc (Zn)	50 g/day	10 mg/L
*QUU requires the waste generator to reduce hexavalent chromium to trivalent chromium.		

Notes:

† These UDML limits are developed for Luggage Point STP catchment. Use the factors below to correct for other nominated STPs:

STP Catchment	Factor
Gibson Island, Oxley Creek	0.5
Bundamba, Goodna, Sandgate	0.2
Fairfield, Wacol, Wynnum, Carole Park	0.1
Regional STPs	Refer request to QUU

QUU may require Approval Holders to meet stricter limits - according to the characteristics of the proposed discharge and the capacity of the relevant sewage catchment.

6 SPECIFIC ACCEPTANCE LIMITS FOR ORGANIC COMPOUNDS

Parameter	Maximum Limit	Remarks
Aldehydes		
Formaldehyde	30 mg/L	
Acetaldehyde	5 mg/L	
Propionaldehyde	5 mg/L	
Dimethyl sulphide	1 mg/L	
Butyl Carbitol	1000 mg/L	Not greater than 2 mg/L at STP influent
Ketones		
Acetone	400 mg/L	
Methyl ethyl ketone	100 mg/L	
Pesticides – total (includes insecticides, herbicides, fungicides)	1.0 mg/L	
Pesticides – organophosphorous (total)	0.1 mg/L	
Per and poly-fluoro alkyl substances (PFAS)	0.0002 mg/L	All discharges must be assessed and approved by QUU in accordance with the QUU PFAS Source Control Management Plan.
Petroleum hydrocarbons		
Total	30 mg/L	
C_6–C_9	5 mg/L	
Benzene	0.04 mg/L	
Toluene	0.5 mg/L	
Ethyl benzene	1.0 mg/L	
Xylene (total)	1.0 mg/L	
Phenolic compounds		
Total Phenols	100 mg/L	
Pentachlorophenol	5 mg/L	
Polynuclear Aromatic Hydrocarbons (PAHs)	5 mg/L	
Volatile organic compounds		
Halogenated (total)	1 mg/L	
Trichloromethane (chloroform)	0.1mg/L	
Tetrachloroethene (perchlorethylene)	0.01mg/L	
Trichloroethene (trichloroethylene)	0.1 mg/L	

Note: QUU may require Approval Holders to meet stricter limits - according to the characteristics of the proposed discharge and the capacity of the relevant sewage catchment.