

## INFORMATION TO BE SUPPLIED WITH TRADE WASTE APPLICATION (PBF070A & PBF070B)

Trade waste plumbing and drainage layout plans (THREE COPIES, SCALE 1:100) are required showing:

1. details and location of all processes, tanks, pits and apparatus which are associated with the generation of trade waste
2. details of proposed pre-treatment processes /apparatus showing
  - flow diagram
  - capacity / dimensions, material of construction and lining, operation and maintenance of all tanks, pits, dosing systems, pH correction and pumps etc.
3. details of pipes, floor channels and drains used to convey the trade waste effluent
4. details of flow measurement equipment (if applicable).

### IMPORTANT NOTES

1. **Restrictions currently exist, limiting the Categories of Trade Waste Gympie Regional Council will accept. Appendix 3 provides details of the currently accepted levels of Trade Waste.**
2. **Should more than one trade waste generator exist on a property then a separate trade waste application is to be submitted for each generator. Subsequently a permit to discharge trade waste into Council's sewer will be issued to each generator on that property.**
3. **A plumbing and drainage clearance certificate must be issued before a trade waste permit will be issued.**
4. **Failure to provide all relevant information will result in delays in processing your application.**
5. **All applications must be signed by the Business Owner.**
6. **Applications must be accompanied by the current fee detailed in this year's Fees & Charges ([CSI100](#))**

Further information on trade waste and assistance with completing the application form may be obtained from:

Gympie Regional Council  
C/- Planning & Development -Plumbing Department  
Ph 07 5481 0644

Return completed application form to:

Gympie Regional Council  
C/- Planning & Development – Plumbing Department  
P.O. Box 155  
Gympie QLD 4570

## EXPLANATORY NOTES TO ASSIST IN COMPLETION OF PERMIT/AGREEMENT APPLICATIONS

### What is Trade Waste?

Trade Waste is the waste water from any industry, business, trade or manufacturing premises that is permitted by Council to discharge to the sewerage system. It does not include waste that is a prohibited substance or stormwater. It does not include domestic wastes of human origin (sewage) which are allowed, without permit, to be discharged to the sewerage system.

### Is all Trade Waste Sewerable?

Only that liquid waste that conforms to Council's Sewer Admission Limits (see Appendix 2) will be accepted for discharge to sewer.

These limits are imposed because waste from many businesses and industries may contain materials that are potentially harmful to sewerage workers, the sewerage system and the environment.

- The health and safety of sewerage workers is put at risk by infectious, toxic and flammable and explosive materials.
- Materials such as acids and sulphates result in corrosion of the sewerage system.
- Metals such as lead, chromium and cadmium and many organic substances are toxic to micro-organisms used in biological sewage treatment processes.
- Oil/grease and gross solids cause blockages.
- The environment may be threatened by "pass through" materials that are not removed by domestic sewage treatment processes.
- Heavy metals and pesticides and other organic substances are concentrated in sewage sludge. Contaminated sludge is unacceptable for reuse in horticulture/agriculture and is difficult to dispose of in an environmentally safe manner.

### The Trade Waste Permit/Agreement.

Trade waste may not be discharged into Council's sewer unless the Business Owner of the premises from which Category 1 and 2 waste is discharged has been granted a trade waste Permit or the Business Owner and Council have negotiated and signed an Agreement for Category 3 discharges. The trade waste Permit and Agreement set out the conditions by which Council will allow trade waste to be discharge to the sewer and the obligations of the Business Owner.

To obtain a Permit/Agreement, the Business Owner must complete and submit, with supporting information, the attached application form.

Copies of the Permit will be sent to the Business Owner. Copies of the Agreement will be supplied to all signatories. Liquid Waste Disposal Contractors wishing to discharge wastes to sewer must apply for a trade waste Permit/Agreement.

### **Renewal of a Trade Waste Permit/Agreement.**

Trade waste Permits and Agreements are not transferable and must be renewed in the event of any of the following:

- change in the waste generator (Business Owner) of a premises.
- change in the nature of business/trade conducted on the premises; and
- alteration to any of the processes involved in the generation of trade waste, including methods of pre-treatment.

### **Trade Waste Charges**

Charges (Gympie Regional Council Fees & Charges) are levied for the discharge of trade waste to sewer to recover the cost of conveyance, treatment and disposal of non domestic waste via the domestic sewerage system. These charges are based on the quantity and quality of waste discharged. For administration purposes dischargers are classified into categories based on the quantity and strength of waste (Appendix 1). A minimum fee applies to all dischargers to cover administration and inspection costs and will apply when charges based on the quantity and quality formula are less than the minimum fee.

Trade waste charges are levied against the business owner.

Charges will be based on the actual discharge and not data supplied in the Permit Application.

Any additional charges incurred because of non-compliance (eg. laboratory charges, inspection fees) will be billed to the Business Owner on a sundry debtor basis.

### **Inspections and Monitoring**

A sampling point for each trade waste stream is to be provided by the owner of the property.

To ensure compliance with Sewer Admission Limits and conditions of the Permit, Council may inspect the property and collect samples of trade waste for analysis. Should the results of testing for BOD/COD and suspended solids exceed the defined limits for Category 1 and 2 discharges, Category 3 charges will be applied.

Council may impose penalty charges, terminate the Permit/Agreement to discharge trade waste to sewer when the conditions of a Permit/Agreement are not met and/or prosecute any person for breach of the Metropolitan Water Supply & Sewerage Act 1909.

### **Self Monitoring**

Generators of Category 3 waste are required to have a self monitoring program in place to provide adequate data on the strength of the waste (BOD or COD and suspended solids) and any other parameters to be charged for, to be used for the calculation of trade waste charges. Council will audit the results to verify their accuracy. Your proposed monitoring program should be outlined in the application. Final details will be negotiated prior to signing the Agreement. The Agreement will include details of the required sampling program and the transfer of data to Council, Council's proposals for auditing and methods to be used for estimation of data lost due to failure of sampling program or flow measurement instrumentation. Self monitoring data can not be used for prosecution purposes.

### Determination of Quantity

For Category 1 and 2 discharges, the volume of trade waste shall be estimated by application of a discharge factor to the total metered water consumption to the property, less an allowance for domestic waste of (150) kL/annum per pedestal ( or alternatively by an agreed allowance for water consumed on the property)

For Category 3 discharges, volume shall be measured by an approved flow measuring device. High volume Category 2 generators may install an approved flow measuring device.

### Authorised Agent

Authorised agent shall mean a person or firm appointed by the owner(s) to act on their behalf only in matters of trade waste. Notification of such appointment must be lodged in writing with Council.

### Terminology of Form

BOD or BOD <sub>5</sub>	Biochemical Oxygen Demand is the amount of oxygen utilised by micro-organisms during the decomposition of organic material at 20C over a period of 5 days. It is a measure of the biodegradable organic content of the waste.
COD	Chemical Oxygen Demand is a measure of the amount of oxygen required to oxidise the organic matter in waste by a strong chemical oxidant. It includes both biodegradable and non-biodegradable organic material.
SS	Suspended solids is the insoluble solid matter in waste water which is retained on a filter of specified size.
Metals	Refers to those substances listed in Schedule IV of Appendix 2 (Specific Limits-Metals) plus aluminium and iron.
Sulphur Compounds	Includes substances such as sulphate, sulphite, sulphide, thiosulphate, metabisulphite
Any other Substances	List any substances in Appendix 2 not covered by the groupings in the application form that occur in your waste. Include any substance in your waste which is not covered specifically in Appendix 2.

## APPENDIX 1

### CATEGORIES FOR DISCHARGE.

- **Category 1**      Low strength/low volume discharges
  - BOD<sub>5</sub> and Suspended Solids < 250 mg/L
  - and/or COD < 500 mg/L
  - Volume < 250 kL/annum

Approval to discharge required - Permit  
No Charge
  
- **Category 2**      Low strength/high volume discharges
  - BOD<sub>5</sub> and Suspended Solids 250-600 mg/L
  - and/or COD 500-1200 mg/L
  - Volume 250-600 kL/annum

Approval to discharge required –Permit  
Charge - Quantity charge on total annual flow which reflects total cost of treatment of wastewater; Minimum fee applies to cover administration, inspection and compliance testing when calculated charges (clause 7.1 of Council's Trade Waste Environmental Management Plan) are less than the minimum fee.
  
- **Category 3**      High strength discharges
  - BOD<sub>5</sub> and Suspended Solids > 600 mg/L
  - and/or COD > 1200 mg/L
  - Volume refer to Appendix 2

Approval to discharge required - Permit in the form of a negotiated agreement required between Council and the Business Owner.

Charge - Quantity and Quality charge on total annual load; Minimum fee applies if calculated charges (clause 7.1 of Council's Trade Waste Environmental Management Plan) are less than the minimum cost of administration, inspection and compliance testing.

Discharges to sewer in ALL Categories must conform to Council's Sewer Admission Limits (Refer: Appendix 2) unless other wise specified in the Permit or Agreement.

Council may, at its discretion, negotiate with a Generator, acceptance of waste to sewer for which General Limit parameter(s) (Schedule 1, Appendix 2) exceed the Sewer Admission Limit. Penalty charges will apply for such parameters.

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

## APPENDIX 2

### SEWER ADMISSION LIMITS

The upper limits for the quality of trade waste discharged to the sewer for all categories are set out below. These admission limits shall apply from 2009. They are subject to periodic review.

#### I. GENERAL LIMITS

Parameter	Concentration mg/L except *
Temperature *	< 38°C
pH *	6 - 10
Biochemical Oxygen Demand (BOD <sub>5</sub> ) +	1000
Chemical Oxygen Demand (COD) +	2000
Total Organic Carbon (TOC) +	1500
Suspended Solids +	600
Total dissolved solids (TDS) <sup>+</sup>	2000
Total oil/grease (freon extractable)	200
Gross solids *	non faecal gross solids shall have a maximum linear dimension of less than 20mm and a quiescent settling rate of less than 3m/hr.
Colour *	limited such as not to give any discernible colour in treatment works discharge
Odour *	not detectable in 1% dilution or causing an odour problem in Council's sewerage system
Chlorine (as Cl <sub>2</sub> )	10
Sulphate ( as SO <sub>4</sub> <sup>-</sup> ) <sup>#</sup>	2000
Sulphite ( as SO <sub>2</sub> )	100
Surfactants - Anionic (MBAS)	500
Aluminium (as Al) <sup>#</sup>	100
Iron (as Fe) <sup>#</sup>	100
Ammonia plus ammonium ion (as N) <sup>#</sup>	100
Total Kjeldahl Nitrogen (as N) <sup>#</sup>	150
Phosphorus (Total P) <sup>#</sup>	50
Manganese (as Mn)	100

+ the total mass load and the capacity of the sewerage system to accept the load shall be considered for each application. # Council may in some circumstances accept waste containing higher concentrations of these substances. Additional charges for treatment will apply.

#### II PROHIBITED DISCHARGES

- Flammable/explosive substances.
- Radioactive substances except as allowed for under the Queensland Radiation Safety Act 1999.
- Pathological and infectious waste and Cytotoxic waste except as allowed for under the *National Guidelines for the Management of Clinical and Related Wastes*, National Health and Medical Research Council, 1988.
- Genetically engineered organisms.
- Rainwater and uncontaminated water.

### III SPECIFIC LIMITS - INORGANIC

Parameter	Concentration mg/L
Boron (B)	100
Bromine (Br <sub>2</sub> )	10
Fluoride (F <sup>-</sup> )	30
Cyanide (CN <sup>-</sup> )	5
Sulphide (S <sup>-</sup> )	5

### IV SPECIFIC LIMITS - METALS

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

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

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

## V. SPECIFIC LIMITS - ORGANIC

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

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

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

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

## VI. VOLUME LIMITS CATEGORY 3

Council shall determine the maximum daily allowable discharge volume for Category 3 trade waste.



## APPENDIX 3

### Trade Waste Category Acceptance at Gympie Regional Council Sewage Treatment plants

Gympie Regional Council currently has limited capacity for treatment of trade waste. As a result, the accepted Categories of trade waste have been limited for each of the Councils Sewage Treatment Plants.

Table 1 identifies the categories of trade waste accepted at Council's sewerage treatment plants (STP's). This information is subject to change, pending augmentation of treatment facilities.

**Table 1: Accepted Categories of Trade Waste for Gympie Regional Council STPs**

Facility	Category 1	Category 2	Category 3
Gympie STP	✓	✓	+
Imbil STP	✓	✓	✗
Tin Can Bay STP	✓	✓	✗
Rainbow Beach STP	✓	✓	✗
Cooloola Cove STP	✓	✓	✗
Kilkivan STP	✓	✓	✗
Goomeri STP	✓	✓	✗

- ✗ Not accepted
- ✓ Accepted Category of Trade Waste
- + Subject to Approval

Pre-treatment of waste prior to discharge to sewer is an option available to generators. For more information contact:

Gympie Regional Council  
Trade Waste Officer  
Ph: 07 54810816