

GIPPSLAND WATER TRADE WASTE QUALITY LIMITS

1 PHYSICAL CHARACTERISTICS

(a) Temperature

The temperature shall not exceed 28 degrees Celsius.

(b) Solids

(i) The suspended solids concentration in any waste shall not exceed 600 grams per cubic metre.

(ii) Gross solids shall pass a bar screen with 13 millimetres openings between bars, and solids shall have a quiescent settling velocity of not greater than 3 metres per hour, in the wastewater.

(iii) The total dissolved solids concentration in any waste shall not exceed 1000 grams per cubic metre. Further Sodium shall not exceed 200 grams per cubic metre and the Sodium Absorption Ratio (SAR) shall not exceed 4.

(iv) No fibrous material shall be present which in the opinion of the Authorised Officer is likely to cause obstructions in the sewer.

(c) Oils, Greases and Solvents

(i) There shall be no free or floating layer of oils, fats or grease.

(ii) The concentration of stable emulsified oil, fat and grease shall not exceed 100 grams per cubic metre as determined using the methodology specified in the current edition of APHA-AWWA-WEF "*Standard Methods for the Examination of Water and Wastewater*".

(iii) There shall be no free solvent or organic liquid other than those specifically permitted under the terms of this Agreement.

(iv) There shall be no solvents which are miscible in water.

(v) There shall be no flammable or toxic organic liquid present other than those specifically permitted under the terms of this Agreement.

(d) Resins

Natural or synthetic resins, plastic monomers, synthetic adhesives, unstable rubber or plastic emulsions or any like material shall not be present.

(e) Radioactive Wastes

Radioactive wastes shall comply with the standards specified in the Health (Radiation Safety) Regulations 1984 as amended.

(f) Colour

The Colour of the wastes when measured on the Platinum Cobalt scale shall not exceed 1000

(g) Electrical Conductivity

The Electrical Conductivity shall not exceed 160 mS/m.

(h) Flammable Substances

There shall be no petrol, or other flammable or explosive substance whether solid liquid or gaseous.

2 CHEMICAL CHARACTERISTICS

(a) pH Value

The pH value shall not be higher than 9.0 or less than 6.0

(b) Organic Strength

The concentration of the Biochemical Oxygen Demand shall not exceed 600 g/m³.

(c) Nitrogen

(i) The concentration of Total Nitrogen shall not exceed 100 grams per cubic metre.

(ii) Notwithstanding the limitations specified in Clause (c)(i), the separate chemical forms of Nitrogen shall not exceed the maximum allowable concentration values as stated in the table hereunder:

Ammonia	50 grams per cubic metre calculated as Nitrogen
Nitrate	30 grams per cubic metre calculated as Nitrogen
Organic Nitrogen	60 grams per cubic metre calculated as Nitrogen

(d) Sulphur

- (i) The concentration of Total Oxidised Sulphur including Sulphate, Thiosulphate, and Sulphite shall not exceed 100 grams per cubic metre calculated as Sulphate.
- (ii) The concentration of Sulphate shall not exceed 100 grams per cubic metre calculated as Sulphate.
- (iii) The concentration of Sulphide shall not exceed 1 gram per cubic metre calculated as Sulphur.
- (iv) The concentration of Sulphite shall not exceed 30 grams per cubic metre calculated as Sulphur.

(e) Corrosive and Toxic Substances

- (i) The maximum allowable concentration in grams per cubic metre of the undermentioned substances shall be as stated in the table hereunder:

Chloride	200
Fluoride	5.0
Cyanide	5.0
Boron	1.0
Total Phenols (incl. Resorcinol)	100
Pentachlorophenol 1	
Formaldehyde.....	50
Selenium	0.030

Organohlorine Pesticides

Aldrin	0.001
Chlordane	0.006
DDT	0.003
Dieldrin	0.001
Heptachlor	0.003
Lindane	0.100
Organophosphate Pesticides	0.100

- (ii) No substance, which in the opinion of the Authorised Officer may be deemed to be toxic to personnel, to sewage treatment processes or to the environment receiving treated effluent, shall be discharged to a sewer.

(f) Metals

The maximum allowable concentrations in grams per cubic metre of the metals discharged to the sewer shall be as stated in the table hereunder:

	CONCENTRATION
	mg/l
Cadmium	0.050
Chromium	0.100
Copper	0.100
Lead	0.300
Mercury	0.001
Silver	1.0
Zinc	0.300
Iron	10

(g) Precipitable Ions

The concentrations of Calcium, Magnesium and other precipitable ions shall be kept at levels which do not cause solids deposition on the internal walls of any pipeline or conveyance structure which GW is responsible for.

(h) Dissolved Oxygen

The dissolved oxygen concentration in the waste shall at all times be greater than 2 grams per cubic metre.

(i) Total Phosphorous

The maximum allowable concentration of phosphorous shall be 15 grams per cubic metre.

(j) MBAS

The maximum allowable concentration of methylene blue active substances shall be 200 grams per cubic metre.

3 OTHER PARAMETERS

Allowable levels of all other compounds present but not listed in this Agreement, shall be covered by the By-Law in conjunction with assessment by the Authorised Officer who shall have sole discretion in determining the maximum allowable concentration of such waste component. ...

4 RATE OF DISCHARGE

The maximum rate of discharge will be to be determined at time of application

5 CATEGORY 3 WASTEWATER

Any wastewater which does not conform with Category 1 & 2 quality limits is

defined as a Category 3 wastewater.

6 WASTE MINIMISATION

Gippsland Water will apply the Victorian Government's Industrial Waste Management Policy (Waste Minimisation) where appropriate, as a guide, to control trade waste discharges. Gippsland Water will require the Company to prepare a Waste Management Plan. These plans need to focus on the sources, loads, minimisation, and treatment of trade waste. As a starting point, EPA publication No. 383, "Guidelines for Preparation of Waste Management Plans", should be consulted.