

30. SEWER ADMISSION LIMITS

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

If, in the opinion of the Trade Waste Officer, it is determined that the wastewater may have an adverse effect on the sewerage system, these limits may be reviewed and replaced with more stringent limits for a specific discharge.

Schedule I - GENERAL LIMITS

Parameter	Concentration mg/L except*
Temperature *	<38 ⁰ C
pH*	6-10
Chemical Oxygen Demand (COD) +	1500
Total Organic Carbon (TOC) +	900
Total Suspended Solids (TSS) +	600
Total Dissolved Solids (TDS)	4000
Total Oil and Grease (TOG)	100
Total Hydrocarbons (THC)	30
Gross Solids*	Non-faecal gross solids shall have a minimum linear dimension of less than 20 mm and a quiescent settling volume 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 the Sewerage System.
Chlorine (as Cl ₂)	10
Sulphate (as SO ₄)	1,000
Sulphite (as SO ₂)	50
Surfactants – Anionic	100
Aluminium (as Al)	100
Iron (as Fe)	100
Ammonia plus ammonium ion (as N)	100
Total Kjeldahl Nitrogen (asN)	150
Phosphorus (Total P)	50
Manganese (as Mn)	100

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

Schedule II - SPECIFIC LIMITS - INORGANIC

Boron (B)	100	Boron is not removed by conventional treatment. High concentrations in effluent may restrict irrigation applications.
Bromine (Br ₂)	10	High concentrations may adversely affect the safety of operations and maintenance personnel.
Fluoride (F)	30	Fluoride is not removed by conventional sewage treatment, however, pre-treatment can easily and economically reduce concentrations to below 20 mg/L.
Cyanide (CN)	5	Cyanide may produce toxic atmospheres in the sewer and adversely affect the safety of operations and maintenance personnel.
Sulphide (S)	5	Sulphides in wastewater may: <ul style="list-style-type: none"> . cause corrosion of sewer structures . generate odours in sewers which could cause public nuisance . result in sewer gases which could adversely affect the safety of operations and maintenance personnel

Schedule III - SPECIFIC LIMITS - METALS

Parameter	Maximum Concentration mg/L	Maximum Mass Load g/day ++
Arsenic (As)	5	15
Barium (Ba)	20	60
Cadmium (Cd)	2	6
Chromium (Cr)		
- Total	20	#60
- Hexavalent	10	
Cobalt (Co)	10	30
Copper (Cu)	10	30
Lead (Pb)	10	30
Mercury (Hg)	0.005	0.015
Nickel (Ni)	10	30
Selenium (Se)	5	15
Silver (Ag)	5	15
Tin (Sn)	10	30
Zinc (Zn)	10	30

++ either the concentration or mass load method may be utilized, however, once the mass load is exceeded, only the concentration method is to be used. Mass load is based on discharge volume of 3kL/day.

when considering daily mass load discharges, hexavalent Cr must be reduced to trivalent Cr

Schedule IV - 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 hydrocarbon (non-flammable)	30
Halogenated Aromatic Hydrocarbons (HAH)	0.002
- Polychlorinated biphenyls (PCB)	0.002
- Polybrominated biphenyls (PBB)	0.002
Polynuclear Aromatic Hydrocarbons (PAH)	5
Pesticides	
* General (insecticides/herbicides/fungicides)	1.0
* Organophosphates	0.05
➤ Azinphos-methyl	
➤ Azinphos-ethyl	
➤ Coumaphos	
➤ Demeton	
➤ Dichlorvos	
➤ Dimethoate	
➤ Disulfoton	
➤ Fenitrothion	
➤ Fenthion	
➤ Malathion	
➤ Methamidophos	
➤ Mevinphos	
➤ Omethoate	
➤ Oxydemeton-methyl	
➤ Parathion	
➤ Triazophos	
➤ Trichlorfon	
* Organochlorines	
➤ Aldrin	0.001
➤ Chlordane	0.006
➤ DDT	0.003
➤ Dieldrin	0.001
➤ Heptachlor	0.003
➤ Lindane	0.05

Schedule IV - OTHER SUBSTANCES

Any substance not listed in the above tables is a prohibited discharge and may not be discharged without the prior approval of Council.

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

Council Trade Waste staff may request specific demonstrable evidence based on degradability and toxicity for any substance when assessing acceptance to sewer.

PROHIBITED SUBSTANCES FOR SEWERAGE

(As per *Water Supply (Safety & Reliability) Act 2008*)

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

Examples of solids or viscous substances that are prohibited substances if of a size or in the quantity mentioned in item 1 –

- ash, cinders, sand, mud, straw and shavings
 - metal, glass and plastics
 - paper and plastic dishes, cups and milk containers whether whole or ground by garbage grinders
 - rags, feathers, tar and wood
 - whole blood, paunch manure, hair and entrails
 - oil and grease.
2. A flammable or explosive solid, liquid or gaseous substance (including petrol).
 3. Floodwater, rainwater and stormwater, and roof water, seepage water, subsoil water and surface water.
 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.

Example of substances under item 4 – substances with a pH lower than 6.0 or greater than 10.0, or having another corrosive property.

5. A substance at a temperature of more than –
 - If the local government has approved a maximum temperature for the substance – the approved maximum temperature; or
 - If paragraph (a) does not apply - 38°C.