

SCHEDULE 1A

PERMITTED DISCHARGE CHARACTERISTICS

1A.1 Introduction

1A.1.1

The nature and levels of the characteristics of any trade waste discharged to the Council sewerage system must at all times comply with the following requirements, except where the nature and levels of such characteristics are varied by the Council as part of a consent to discharge a trade waste. If a discharge characteristic is not specifically mentioned in this Schedule and it is not referred to in Schedule 1B it can be the subject of a conditional trade waste consent

1A.1.2

The Council will take into consideration the combined effects of trade waste discharges and may make any modifications to the following acceptable characteristics for individual discharges the Council believes are appropriate.

1A.1.

The nature and levels of any characteristic may be varied to meet any new resource consents or other legal requirements imposed on the Council, as provided for in clause 20.

1A.2 Physical characteristics

1A.2.1 *Flow*

The maximum instantaneous flow rate must be less than 2.0 L/s.

1A.2.2 *Temperature*

The temperature must not exceed 40 °C.

1A.2.3 *Solids*

- (a) Non-faecal gross solids will have a maximum dimension which must not exceed 15 mm.
- (b) The suspended solids content of any trade waste will have a maximum concentration which must not exceed 600 g/m³.
- (c) The settleable solids content of any trade waste must not exceed 50 mL/L.
- (d) The total dissolved solids concentration in any trade waste will be subject to the approval of the Council having regard to the volume of the waste to be discharged, and the suitability of the drainage system and the treatment plant to accept such waste.
- (e) Fibrous, woven, or sheet film or any other materials which may adversely interfere with the free flow of sewage in the drainage system or treatment plant must not be present.

1A.2.4 *Oil and grease*

- (a) There must be no free or floating layer.
- (b) There must be no discharge of fats, oil and grease containing substances that will become viscous between 0 deg C and 65 deg C.
- (c) A trade waste containing fat, oil or grease must not exceed 200g/m³.

1A.2.5 *Solvents and other organic liquids*

There must be no free layer (whether floating or settled) of solvents or organic liquids.

1A.2.6 *Emulsions of paint, latex, adhesive, rubber, plastic*

- (a) Where such emulsions are not treatable these may be discharged into the sewer subject to the total suspended solids not exceeding 600 g/m³ or a concentration agreed with the Council.
- (b) The Council may determine that the need exists for pre-treatment of such emulsions if it considers that trade waste containing emulsions unreasonably interferes with the operation of the Council treatment plant e.g. reduces the percentage UVT (ultra violet transmission).
- (c) Emulsions of both treatable and non-treatable types may only be discharged to the sewer at a concentration and pH range that prevents coagulation and blockage at the mixing zone in the public sewer.

1A.2.7 *Radioactivity*

Radioactivity levels must not exceed the Office of Radiation Safety Code of Practice CSP1 for the Use of Unsealed Radioactive Material.

1A.2.8 *Colour*

No waste may have colour or colouring substance that causes the discharge to be coloured to the extent that it impairs wastewater treatment processes or compromises the treated sewage resource consent to discharge held by the Council.

1A.3 Chemical characteristics

1A.3.1 *pH value*

The pH must be between 6.0 and 10.0 at all times.

1A.3.2 *Maximum concentrations*

The maximum concentrations permissible for the chemical characteristics of an acceptable discharge are set out in Table 1A.1 and Table 1A.2.

TABLE 1A.1 – GENERAL CHEMICAL CHARACTERISTICS

(Mass limits may be imposed, - refer to clause 23)

The BOD₅ must not exceed 600 g/m³.

Characteristic	Maximum concentration (g/m ³)
MBAS (Methylene blue active substances)	500
Ammonia (measured as N)	
– free ammonia	50
– ammonium salts	200
Kjeldahl nitrogen	500
Total phosphorus (as P)	150
Sulphate (measured as SO ₄)	500
Sulphite (measured as SO ₂)	1500 (with good mixing) 15
Sulphide – as H ₂ S on acidification	5
Chlorine (measured as Cl ₂)	
– free chlorine	3
– hypochlorite	30
Dissolved aluminium	100
Dissolved iron	100
Boron (as B)	25
Bromine (as Br ₂)	5
Fluoride (as F)	30
Cyanide – weak acid dissociable (as CN)	1

TABLE 1A.2 – HEAVY METALS

(Mass limits may be imposed, refer to clause 23)

Metal	Maximum concentration
	(g/m ³)
Antimony	10
Arsenic	5
Barium	10
Beryllium	0.005
Cadmium	0.5
Chromium (trivalent and hexavalent)	5
Cobalt	10
Copper	5
Lead	10
Manganese	20
Mercury	0.005
Molybdenum	10
Nickel	5
Selenium	10
Silver	2
Thallium	10
Tin	20
Zinc	10

TABLE 1A.3 – ORGANIC COMPOUNDS AND PESTICIDES

(Mass limits may be imposed, refer to clause 23)

Compound	Maximum concentration (g/m ³)
Formaldehyde (as HCHO)	50
Phenolic compounds (as phenols) excluding chlorinated phenols	50
Chlorinated phenols	0.02
Petroleum hydrocarbons	30
Halogenated aliphatic compounds	1
Monocyclic aromatic hydrocarbons	5
Polycyclic (or polynuclear) aromatic hydrocarbons (PAHs)	0.05
Halogenated aromatic hydrocarbons (HAHs)	0.002
Polychlorinated biphenyls (PCBs) 0.002	
Polybrominated biphenyls (PBBs)	0.002 each
Pesticides (general) (includes insecticides, herbicides, fungicides and excludes organophosphate, organochlorine and any pesticides not registered for use in New Zealand)	0.2 in total
Organophosphate pesticides	0.1