Whangarei District Council

Trade Waste Control

August 2023

The purpose of the Trade Waste Control is to support the Trade Waste Bylaw 2023 by specifying various trade waste discharge limits and requirements issued under clause 7.9(1) of the Bylaw, and include:

- Limits to the flow rate and volume for trade waste discharges in clause 1
- Limits to the characteristics and substances in any trade waste discharge in clause 2.

Other parts of the Trade Waste Control assist with its administration by:

- Stating the name of this control, when it comes into force and where it applies, in clauses 3, 4 and 5

1. Trade waste discharge flow rate and volume control

1. The control in 2) relates to clause 4.6b of the Bylaw. This control is made under clause 7.8 of the Trade Waste Bylaw.
2. The following table specifies limits to the flow rate and volume of any trade waste discharge from a trade premise into the public wastewater system.

PARAMETER	LIMIT	REASON
Flow rate	2 litres per second	Risk of overloading the hydraulic capacity of the public wastewater network
Volume	2 cubic metres per day	Risk of overloading the hydraulic capacity of the public wastewater network

2. Trade waste characteristics and substances control

1. This control is made under clause 7.8 of the Trade Waste Bylaw.
2. This clause specifies limits for any characteristics and substances of any trade waste discharge from a trade waste premise into the public wastewater system.

Trade waste consents may contain different limits to those specified in this control and may include mass limits.

Physical characteristics

Temperature

The temperature shall not exceed 40°C.

Solids

a. non-faecal gross solids shall have a maximum dimension which shall not exceed 15mm

b. the suspended solids content of any trade wastes shall have a maximum concentration, which shall not exceed 2000g/m3. For Significant Industry this may be reduced to 600g/m3

c. the settleable solids content of any trade waste shall not exceed 50mL/L

d. the total dissolved solids concentration in any trade waste shall be subject to the Approval of Council having regard to the volume of 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 wastewater in the drainage system or treatment plant shall not be present.

Oil and grease

a. there shall be no free or floating layer

b. a trade waste with mineral oil, fat or grease unavoidably emulsified, which in the opinion of

Council is not biodegradable shall not exceed 200g/m3 as petroleum ether extractable matter when the emulsion is stable at a temperature of 15°C and when the emulsion is in contact with and diluted by a factor of 10 by raw sewage, throughout the range of pH 6.0 to pH 10.0

c. a trade waste with oil, fat or grease unavoidably emulsified, which in the opinion of Council is biodegradable shall not exceed 500g/m3 when the emulsion is stable at a temperature of 15°C and when the emulsion is in contact with and diluted by a factor of 10 by raw sewage throughout the range of pH 4.5 to pH 10.0

d. emulsified oil, fat or grease shall not exceed 100g/m3 as petroleum ether extractable matter when the emulsion is unstable at a temperature of 15°C and when the emulsion is in contact with and diluted by a factor of 10 by raw sewage throughout the range of pH 4.5 to pH 10.0.

Solvents and other organic liquids

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

Emulsions of paint, latex, adhesive, rubber, plastic or similar material

a. where such emulsions are not treatable these may be discharged into the sewer subject to the total suspended solids not exceeding 1000g/m³ or the concentration agreed with Council

b. Council may determine that the need exists for pre-treatment of such emulsions if they consider that the trade waste containing the emulsions unreasonably interferes with the operation of Council treatment plant

c. such emulsions of both treatable and non-treatable types, shall be discharged to the sewer only at a concentration and pH range that prevents coagulation and blockage at the mixing zone in the sewer.

Radioactivity

Radioactivity levels shall not exceed National Radiation Laboratory Guidelines.

Colour

No waste shall 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 wastewater discharge consent.

Chemical characteristics

pH Value

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

Organic strength

The Biochemical Oxygen Demand (BOD5) of any waste shall not exceed 600g/m3.

The Chemical Oxygen Demand (COD) of any waste shall not exceed 2000g/m3.

Maximum concentrations

The maximum concentrations permissible for the chemical characteristics of an acceptable discharge are set out in Table 1, Table 2, Table 3 and Table 4.

Table 1 – General chemical characteristics

CHARACTERISTIC	MAXIMUM CONCENTRATION (g/m^3)
MBAS (Methylene blue active substances)	500
Ammonia (measured as N)	
- free ammonia	50
- ammonium salts	200
Kjeldahl Nitrogen	150
Total phosphorus (as P)	50
Sulphate (measured as SO4)	500
Sulphite (measured as SO2)	15
Sulphide – as H2S on acidification	5
Chlorine (measured as Cl2)	
- free chlorine	3
- hypochlorite	30
Dissolved aluminium	100
Dissolved iron	100
Boron (as B)	25
Bromine (as Br2)	5
Fluoride (as F)	30
Cyanide – weak acid dissociable (as CN)	5

Table 2 – Heavy metals

METAL	MAXIMUM CONCENTRATION (g/m^3)
Antimony	10
Arsenic	5
Barium	10
Beryllium	0.005
Cadmium	0.5
Chromium	5
Cobalt	10
Copper	10
Lead	10
Manganese	20
Mercury	0.05
Molybdenum	10
Nickel	10
Selenium	10
Silver	2
Thallium	10
Tin	20
Zinc	10

Table 3 – Organic compounds and pesticides

COMPOUND	MAXIMUM CONCENTRATION (g/m^3)
Formaldehyde (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 each
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

Table 4 - Substances

COMPOUND	SUBSTANCE MASS LIMIT (KG/DAY)	REASON
All substances	Not exceeding 5 per cent of the total mass for that substance received at a wastewater treatment plant	Risk of overloading the treatment capacity of the wastewater treatment plant

3. Title

This control is the Trade Waste Control 2023.

4. Commencement

This control comes into force on 4 August 2023.

5. Application

This policy applies to Whangarei District.

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