



Rangitikei
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RANGITIKEI DISTRICT COUNCIL

TRADE WASTE OPERATIONAL GUIDELINES 2013

INCORPORATED BY REFERENCE IN THE WATER RELATED SERVICES BYLAW 2013

1. Commencement

These operational guidelines came into force on xx of 13 May 2013, in conjunction with the Water Related Services Bylaw 2013.¹

2. Amendment

These operational guidelines shall only be amended by resolution of the Rangitikei District Council.

3. Interpretation

When interpreting these operational guidelines, use the definitions set out in the Water Related Services Bylaw 2013.

Abbreviations

BOD	Biochemical Oxygen Demand
HSNO	Hazardous Substances and New Organisms Act 1996
kg/day	kilogram per day
LGA	Local Government Act 2002
LTCCP	Long Term Council Community Plan 2006/16
MfE	Ministry for the Environment
MSDS	material safety data sheets
PH	measure of acidity/alkalinity
RMA	Resource Management Act 1991
TSS	Total Suspended Solids concentration
TA	Territorial Authority
WWA	Waste Water Authority

4. TRADE WASTE DISCHARGES AND CONSENTS

4.1. Classification of trade waste discharges

Trade waste discharges shall be classified as one of the following types:

- (a) Permitted (consent required);
- (b) Conditional (consent required, conditions may be applied); or
- (c) Prohibited (not acceptable for discharge).

The Council is not obliged to accept any trade waste. No application for a trade waste consent shall be approved where the trade waste discharge would contain, or is likely to contain, characteristics which are prohibited.

¹ Part 4, clause 25.1

No person shall discharge, or cause to be discharged, any trade waste to the Council sewer except in accordance with the provisions of this bylaw.

4.2. Application for a trade waste consent

Every person who does, proposes to, or is likely to:

- (a) Discharge into the sewerage system any trade waste (either continuously, intermittently or temporarily); or
- (b) Vary the characteristics of a consent to discharge that has previously been granted; or
- (c) Vary the conditions of consent to discharge that has previously been granted; or
- (d) Significantly change the method or means of pre-treatment for discharge under an existing consent,

shall if required complete an application in the prescribed form for the discharge of that trade waste, or for the proposed variations.

Where the trade premises produce trade waste from more than one area, a separate copy of the "Description of Trade Waste and Premises" shall be included in any application for trade waste discharge for each area. This applies whether or not the separate areas are part of a single or separate trade process.

The applicant shall ensure that the application and every other document conveying required information is properly executed and any act done for, or on behalf of, the eventual consent holder (whether for reward or not) in making any such application shall be deemed to be an act of the consent holder.

The Council may require an application to be supported by an independent report/statement completed by a suitably experienced and external auditor to verify any or all information supplied by the applicant, and this may include a management plan.

Every application shall be accompanied by a trade waste application fee in accordance with the Council's Schedule of Rates and Charges.

4.3. Acknowledgement of an application

The Council shall acknowledge the application in writing within 10 working days of the receipt of the application.

4.4. Requests for further information

On the receipt of any application for a trade waste consent to discharge from any premises or to alter an existing discharge, the Council may:

- (a) Require the applicant to submit any additional information which it considers necessary to reach an informed decision;
- (b) Require the applicant to submit a management plan to the satisfaction of the Council;
- (c) Whenever appropriate have the discharge investigated and analysed as provided for in accordance with these operational guidelines.

The Council shall notify the applicant of any requirement under this clause within 10 working days of receipt of the application.

4.5. Consideration of an application

Within 15 working days (or extended as necessary by the Council) of receipt of an application complying with this bylaw and/or all requirements under 4.4, whichever is the later, the Council shall, after considering the relevant matters, action one of the following in writing:

- (a) Grant the application as a permitted trade waste and inform the applicant of the decision by issuing the appropriate notice;
- (b) Grant the application as a conditional trade waste and inform the applicant of the decision and the conditions imposed on the discharge by issuing the appropriate notice of consent to the discharge; or
- (c) Decline the application and notify the applicant of the decision giving a statement of the reasons for refusal.

4.6. Consideration criteria

In considering any application for a trade waste consent to discharge from any trade premises or tankered waste into the sewerage system and in imposing any conditions on such a consent, the Council shall take into consideration the quality, volume, and rate of discharge of the trade waste from such premises or tanker in relation to:

- (a) The health and safety of Council staff, technical advisors and the public;
- (b) The limits and/or maximum values for characteristics of trade waste as specified in Schedules 1A and 1B of this bylaw;
- (c) The extent to which the trade waste may react with other trade waste or foul water to produce an undesirable effect, e.g. settlement of solids, production of odours, accelerated corrosion and deterioration of the sewerage system etc.;
- (d) The flows and velocities in the sewer, or sewers and the material or construction of the sewer or sewers;
- (e) The capacity of the sewer or sewers and the capacity of any sewage treatment works, and other facilities;
- (f) The nature of any sewage treatment process and the degree to which the trade waste is capable of being treated in the sewage treatment works;
- (g) The timing and balancing of flows into the sewerage system;
- (h) Any statutory requirements relating to the discharge of raw or treated wastewater to receiving waters, the disposal of sewage sludges, beneficial use of biosolids, and any discharge to air, (including the necessity for compliance with any resource consent, discharge permit or water classification);
- (i) The effect of the trade waste discharge on the ultimate receiving environment;

- (j) The conditions on resource consents for the sewerage system and the residuals from it;
- (k) The possibility of unscheduled, unexpected or accidental events and the degree of risk these could cause to humans, the sewerage system and the environment;
- (l) Consideration for other existing or future discharges;
- (m) Amenability of the trade waste to pre-treatment;
- (n) Existing pre-treatment works on the premises and the potential for their future use;
- (o) Cleaner production techniques and waste minimisation practices;
- (p) Requirements and limitations related to sewage sludge disposal and reuse;
- (q) Control of storm water;
- (r) Management plan; and
- (s) Tankered waste being discharged at an approved location/s.

4.7. Conditions of trade waste consent

Any trade waste consent to discharge may be granted subject to such conditions that the Council may impose, including but not limited to:

- (a) The particular public sewer or sewers to which the discharge will be made;
- (b) The maximum daily volume of the discharge and the maximum rate of discharge, and the duration of maximum discharge;
- (c) The maximum limit or permissible range of any specified characteristics of the discharge, including concentrations and/or mass limits determined in accordance with 4.8;
- (d) The period or periods of the day during which the discharge, or a particular concentration, or volume of discharge may be made;
- (e) The degree of acidity, or alkalinity of the discharge at the time of discharge;
- (f) The temperature of the trade waste at the time of discharge;
- (g) The provision by, or for the consent holder, at the consent holder's expense, of screens, grease traps, silt traps or other pre-treatment works to control trade waste discharge characteristics to the consented levels;
- (h) The provision and maintenance at the consent holder's expense of inspection chambers, manholes or other apparatus or devices to provide reasonable access to drains for sampling and inspection;
- (i) The provision and maintenance of a sampling, analysis and testing programme and flow measurement requirements, at the consent holder's expense;
- (j) The method or methods to be used for the measuring flow rates and/or volume and taking samples of the discharge for use in determining the amount of any trade waste charges applicable to that discharge;
- (k) The provision and maintenance by, and at the expense of, the consent holder of such meters or devices as may be required to measure the volume or flow rate of any trade waste being discharged from the premises, and for the testing of such meters;

- (l) The provision and maintenance, at the consent holder's expense of such services, (whether electricity, water or compressed air or otherwise), which may be required, in order to operate meters and similar devices;
- (m) At times specified, the provision in a Council approved format by the consent holder to the Council of all flow and/or volume records and results of analyses (including pre-treatment by-products e.g. sewage sludge disposal);
- (n) The provision and implementation of a management plan;
- (o) Risk assessment of damage to the environment due to an accidental discharge of a chemical;
- (p) Waste minimisation and management;
- (q) Cleaner production techniques;
- (r) Remote control of discharges;
- (s) Third party treatment, carriage, discharge or disposal of by-products of pre-treatment of trade waste (including sewage sludge disposal);
- (t) Requirement to provide a bond or insurance in favour of the Council where failure to comply with the consent could result in damage to the Council's sewerage system, its treatment plants, or could result in the Council being in breach of any statutory obligation; and
- (u) Remote monitoring of discharges.

4.8. Duration

Permitted discharges shall remain in force indefinitely until either:

- (a) Cancellation under 3.1.2 or 4.10;
- (b) The quantity and nature of the discharge changes significantly.
- (c) If in the opinion of the Council the discharge changes or is likely to change to such an extent that it becomes a conditional or prohibited trade waste.
- (d) The Council changes the trade waste management procedures by implementation of changed trade waste bylaw conditions or any amendment to, or replacement of, its trade waste bylaw; or
- (e) The conditions on resource consents for the sewerage system and the residuals from it change.

In all cases, after appropriate consultation, the person shall apply within 10 working days of this change occurring for a conditional consent, in accordance with 4.2 of this bylaw. This application shall be approved prior to the occurrence of any new discharge.

Conditional consents under this bylaw shall expire at the end of a term fixed by the Council subject to the following:

- (a) Conditional consents may be given for a term not exceeding five years to a consent holder who at the time of application satisfies the Council that:
 - (i) The nature of the trade activity, or the process design and/or management of the premises are such that the consent holder has a demonstrated ability to meet the conditions of the consent during its term; and/or

- (ii) Cleaner production techniques are successfully being utilised, or that a responsible investment in cleaner production equipment or techniques is being made; and/or
- (iii) Significant investment in pre-treatment facilities has been made, such that a longer period of certainty for the amortising of this investment is considered reasonable; and/or
- (iv) The reissuing of a consent cannot be unreasonably withheld.

Notwithstanding the above the Council retains the right to review the conditions at an earlier time. The reasons for such an earlier review could include:

- (i) The level of consent holder compliance, including any accidents including spills or process mishaps.
 - (ii) Matters pertaining to the Council's resource consents for the sewerage system.
 - (iii) Matters pertaining to the Council's environmental policies and outcomes.
 - (iv) New control and treatment technologies and processes.
 - (v) Any of the matters outlined in section 5.
 - (vi) Matters pertaining to the Council's legal obligations.
- (b) In all other cases the term of a conditional trade waste consent should not exceed two years;
 - (c) In all cases where either the consent holder or the owner of the premises changes, or there is a change of use, a new application for a conditional trade waste consent shall be made. It shall be the responsibility of the consent holder to lodge the new application; and
 - (d) The conditions on resource consents for the sewerage system and the residuals from it change.

4.9. Technical review and variation

The Council may at any time during the term of a trade waste consent, by written notice to the consent holder (following a reasonable period of consultation), vary any condition to such an extent as the Council considers necessary following a review of the technical issues considered when setting conditions of consent. This may be due to new information becoming available or to meet any new resource consent imposed on the discharge from the Council's treatment plant, or with any other legal requirements imposed on the Council.

A consent holder may at any time during the term of consent, by written application to the Council, seek to vary any condition of consent, as provided for in 4.7 of this bylaw.

4.10. Suspension and/or Cancellation of the right to discharge

The Council may suspend or cancel any consent or right to discharge at any time following 20 working days' (during which consultation has occurred) notice to the consent holder or person discharging any trade waste:

- (a) For the failure to comply with any condition of the consent;
- (b) For the failure to maintain effective control over the discharge;

- (c) For the failure to limit in accordance with the requirements of a consent the volume, nature, or composition of trade waste being discharged;
- (d) In the event of any negligence which, in the opinion of the Council, threatens the safety of, or threatens to cause damage to any part of the sewer system or the treatment plant or threatens the health or safety of any person;
- (e) If any occurrence happens that, in the opinion of the Council, poses a serious threat to the environment;
- (f) In the event of any breach of a resource consent held by the Council issued under the Resource Management Act 1991;
- (g) Failure to provide and when appropriate update a management plan as required for a conditional consent;
- (h) Failure to follow the management plan provisions at the time of an unexpected, unscheduled or accidental occurrence;
- (i) Failure to pay any charges under this bylaw; or
- (j) If any other circumstances arise which, in the opinion of the Council, render it necessary in the public interest to cancel the right to discharge.

If any process changes require more than 20 working days, reasonable time may be given to comply with the consent conditions.

Furthermore, any trade waste consent or discharge may at any time be summarily cancelled by the Council on giving to the consent holder or person discharging written notice of summary cancellation if:

- (a) They discharge any prohibited substance;
- (b) The Council is lawfully directed to withdraw or otherwise to terminate the consent summarily;
- (c) They discharge any trade waste unlawfully;
- (d) The continuance of discharge is, in the opinion of the Council, a threat to the environment or public health; -
- (e) The continuance of discharge may, in the opinion of the Council, result in a breach of a resource consent held by the Council; or
- (f) In the opinion of the Council the continuance of the discharge puts at risk the ability of the Council to comply with conditions of a resource consent and/or requires identified additional treatment measures or costs to seek to avoid a breach of any such resource consent.

5. TRADE WASTE APPROVAL CRITERIA

5.1. Pre-treatment

The Council may approve a trade waste discharge subject to the provision of appropriate pre-treatment systems to enable the person discharging to comply with the bylaw. Such pre-treatment systems shall be provided, operated and maintained by the person discharging at their expense.

Refuse or garbage grinders, and macerators shall not be used to dispose of solid waste from trade premises to the sewerage system unless approved by the Council.

The person discharging shall not, unless approved by the Council, add or permit the addition of any potable, condensing, cooling water or storm water to any trade waste stream in order to vary the level of any characteristics of the waste.

5.2. Mass limits

A conditional trade waste consent to discharge may impose controls on a trade waste discharge by specifying mass limits for any characteristic.

Mass limits may be imposed for any characteristic. Any characteristic permitted by mass limit shall also have its maximum concentration limited to the value scheduled unless approved otherwise.

When setting mass limit allocations for a particular characteristic the Council shall consider:

- (a) The operational requirements of and risk to the sewerage system, and risks to occupational health and safety, public health, and the ultimate receiving environment;
- (b) Whether or not the levels proposed pose a threat to the planned or actual beneficial reuse of biosolids or sewage sludge;
- (c) Conditions in the sewerage system near the trade waste discharge point and elsewhere in the sewerage system;
- (d) The extent to which the available industrial capacity was used in the last financial period and is expected to be used in the forthcoming period;
- (e) Whether or not the applicant uses cleaner production techniques within a period satisfactory to the Council;
- (f) Whether or not there is any net benefit to be gained by the increase of one characteristic concurrently with the decrease of another to justify any increased application for industrial capacity;
- (g) Any requirements of the Council to reduce the pollutant discharge of the sewerage system;
- (h) How great a proportion the mass flow of a characteristic of the discharge will be of the total mass flow of that characteristic in the sewerage system;
- (i) The total mass of the characteristic allowable in the sewerage system, and the proportion (if any) to be reserved for future allocations; and
- (j) Whether or not there is an interaction with other characteristics which increases or decreases the effect of either characteristic on the sewer reticulation, treatment process, or receiving water (or land).

6. SAMPLING, TESTING AND MONITORING

6.1. Flow metering

Flow metering may be required by the Council:

- (a) On discharges when there is not a reasonable relationship between a metered water supply to the premises, and the discharge of trade waste;
- (b) When the Council will not approve a method of flow estimation; or
- (c) When the discharge represents a significant proportion of the total flow/load received by the Council.

The consent holder shall be responsible for the supply, installation, reading and maintenance of any meter required by the Council for the measurement of the rate or quantity of discharge of trade waste. These devices shall be subject to the approval of the Council, but shall remain the property of the consent holder.

Records of flow and/or volume shall be available for viewing at any time by the Council, and shall be submitted to the Council at prescribed intervals by the consent holder in a format approved by the Council.

Meters shall be located in a position approved by the Council which provides the required degree of accuracy and should be readily accessible for reading and maintenance. The meters shall be located in the correct position according to the manufacturer's installation instructions.

The consent holder shall arrange for in situ calibration of the flow metering equipment and instrumentation by a person and method approved by the Council upon installation and at least once a year thereafter to ensure its performance. The meter accuracy should be $\pm 10\%$ but with no greater a deviation from the previous meter calibration of $\pm 5\%$. A copy of independent certification of each calibration result shall be submitted to the Council.

Should any meter, after being calibrated, be found to have an error greater than that specified in 6.1 as a repeatable measurement, the Council may make an adjustment in accordance with the results shown by such tests back-dated for a period at the discretion of the Council but not exceeding 12 months, and the consent holder shall pay or be credited a greater or lesser amount according to such adjustment.

6.2. Estimating discharge

Where no meter or similar apparatus is warranted, the Council may require that a percentage of the water supplied to the premises (or other such basis as seems reasonable) be used for estimating the rate or quantity of flow for the purposes of charging.

Should any meter be out of repair or cease to register, or be removed, the Council shall estimate the discharge for the period since the previous reading of such meter, (based on the average of the previous 12 months charged to the person discharging) and they shall pay according to such an estimate. Provided that when by reason of a large variation of discharge due to seasonal or other causes, the average of the previous 12 months would be an unreasonable estimate of the discharge, then the Council may

take into consideration other evidence for the purpose of arriving at a reasonable estimate, and the person discharging shall pay according to such an estimate.

Where in the opinion of the Council, a meter has been tampered with, the Council (without prejudice to the other remedies available) may declare the reading void and estimate discharge as provided above.

6.3. Sampling and analysis

As determined by the Council sampling, testing and monitoring may be undertaken to determine if:

- (a) A discharge complies with the provisions of this bylaw;
- (b) A discharge is to be classified as a permitted, conditional, or prohibited, refer to 4.1;
- (c) A discharge complies with the provisions of Schedule 1A for permitted discharge and any consent to discharge; and
- (d) Trade waste consent charges are applicable to that discharge.

The taking, preservation, transportation and analysis of the sample shall be undertaken by an authorised officer or agent of the Council, or the person discharging in accordance with accepted industry standard methods, or by a method specifically approved by the Council. The person discharging shall be responsible for all reasonable costs. Where a dispute arises as to the validity of the methods or procedures used for sampling or analysis, the dispute may be submitted to a mutually agreed independent arbitrator.

All authorised officers or authorised agents of the Council, or any analyst may enter any premises believed to be discharging trade waste at any time in order to determine any characteristics of any actual or potential discharge by:

- (a) Taking readings and measurements;
- (b) Carrying out an inspection; and/or
- (c) Taking samples for testing,
of any solid, liquid, or gaseous material or any combination or mixture of such materials being discharged.

Authorisation for entry to premises is given under the LGA and entry shall be in compliance with the health and safety policies of that particular site.

6.4. Monitoring

The Council is entitled to monitor and audit any trade waste discharge for compliance. Whether for a permitted discharge or a conditional consent discharge monitoring may be carried out as follows:

- (a) The Council or its authorised agent will take the sample and arrange for this sample to be analysed in an approved laboratory by agreed/approved analytical methods;
- (b) The sampling procedure will be appropriate to the trade waste and the analysis;

- (c) The Council will audit the sampling and analysis carried out by a self-monitoring trade waste discharger. Analysis will be performed by an approved laboratory. Inter-laboratory checks are to be part of this process;
- (d) The Council will audit the sampling and analysis carried out by an analyst. Analysis will be performed by an approved laboratory. Inter-laboratory checks are to be part of this process; and
- (e) The Council will audit the trade waste consent conditions including any management plans.

At the discretion of the Council all costs of monitoring shall be met by the discharger either through direct payment to the laboratory or to the Council.

Normally a single grab or composite sample is sufficient. If required the grab or composite sample can be split equally into three as follows:

- (a) One portion of the sample goes to the trade waste discharger for appropriate analysis and/or storage;
- (b) A second portion of the sample shall be analysed at a laboratory approved by the Council;
- (c) A third portion of the sample is retained by the Council for 20 working days, for additional analysis if required.

Due consideration will be applied to any changes that could occur in retained trade waste samples and provisions to mitigate against changes will be adopted where practicable.

In all cases the samples shall be handled in an appropriate manner such that the characteristics being tested for are, as far as reasonably possible, preserved.

All samples shall be preserved, handled, transported and delivered to an approved laboratory according to best possible practice and approved standards.

6.5. Tankered wastes

Tankered wastes shall not be discharged into the Council's sewerage system by any person or consent holder not compliant with the Liquid and Hazardous Wastes Code of Practice.

The Council may accept tankered wastes for discharge at an approved location. Tankered wastes shall:

- (a) Be transported by a consent holder to discharge domestic septic tank or industrial wastes;
- (b) Have material safety data sheets (MSDS) supplied to the Council detailing the contents of a waste;
- (c) Be tested to determine their composition if the contents of the waste are not known. Specialist advice on pre-treatment or acceptance may be required. The cost of all testing and advice shall be borne by the consent holder;

- (d) Not be transported to the disposal site until appropriate arrangements and method for disposal have been determined by the Council;
- (e) To prevent cross-contamination between tanker loads, the tanker shall be thoroughly washed prior to collecting a load for disposal into the sewerage system; and
- (f) Require that 24 hours' notice be given for the disposal of wastes other than those sourced from domestic septic tanks.

Any person illegally disposing of, or causing to be disposed, tankered waste either by incorrect disclosure of contents (characteristics and/or amount) or dumping into the Council's sewerage system other than the prescribed location will be in breach of the bylaw.

Any water used during the repair and construction of water mains shall be de-chlorinated prior to the discharge into the sewerage system. Application for temporary discharge consent shall be made. Such water shall not be discharged to stormwater or adjacent water courses without appropriate approval.

SCHEDULE 1A

PERMITTED DISCHARGE CHARACTERISTICS

Introduction

The nature and levels of the characteristics of any trade waste discharged to the WWA system shall comply at all times with the following requirements, except where the nature and levels of such characteristics are varied by the WWA as part of an approval to discharge a trade waste.

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

An additional column in tables' 1A.1, 1A.2 and 1A.3 for mass limits may be added as required.

The nature and levels of any characteristic may be varied to meet any new resource consents or other legal requirements imposed on the WWA. Refer to 4.9 of the bylaw.

Physical characteristics

Flow

- (a) The 24 hour flow volume shall be less than 10m³/day.
- (b) The maximum instantaneous flow rate shall be less than 2.0 L/s.

Temperature

The temperature shall not exceed 40 °C.

Solids

- (a) Non-faecal gross solids shall have a maximum dimension which shall not exceed 15 mm.
- (b) The suspended solids content of any trade waste shall have a maximum concentration which shall not exceed 2000 g/m³. For significant industry this may be reduced to 600 g/m³.
- (c) The settleable solids content of any trade waste shall not exceed 50 mL/L.
- (d) The total dissolved solids concentration in any trade waste shall be subject to the approval of the WWA 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 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 the Council is not biodegradable shall not exceed 200 g/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 the Council is biodegradable shall not exceed 500 g/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 100 g/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

- (a) Where such emulsions are not treatable these may be discharged into the Sewer subject to the total suspended solids not exceeding 1000 g/m³ or the concentration agreed with the Council.
- (b) The Council may determine that the need exists for pre-treatment of such emulsions if they consider that trade waste containing emulsions unreasonably interferes with the operation of the Council's treatment plants e.g. reduces % UVT (ultra violet transmission).
- (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 public 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 sewage 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 may require to be restricted where the capacity for receiving and treating BOD5 is limited. A BOD5 restriction may be related to Mass Limits.

Where there is no Council treatment system for organic removal, the BOD5 shall not exceed 1000 g/m³. For significant industry this may be reduced to 600 g/m³.

Maximum concentrations

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

Table 1A.1 – General chemical characteristics

(Mass limits may be imposed, refer to 5.2)

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 SO ₄)	500 1500 (with good mixing)
Sulphite (measured as SO ₂)	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)	5

Table 1A.2 – Heavy metals

(Mass limits may be imposed, refer to 5.2)

Metal	Maximum concentration (g/m³)	Metal	Maximum concentration (g/m³)
Antimony	10	Manganese	20
Arsenic	5	Mercury	0.05
Barium	10	Molybdenum	10
Beryllium	0.005	Nickel	10
Cadmium	0.5	Selenium	10
Chromium	5	Silver	2
Cobalt	10	Thallium	10
Copper	10	Tin	20
Lead	10	Zinc	10

Table 1A.3 – Organic compounds and pesticides

(Mass limits may be imposed, refer to 5.2)

Compound	Maximum concentration (g/m³)
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

SCHEDULE 1B PROHIBITED CHARACTERISTICS

Introduction

This schedule defines prohibited trade wastes.

1B.1 Prohibited Characteristics

Any discharge has prohibited characteristics if it has any solid liquid or gaseous matters or any combination or mixture of such matters which by themselves or in combination with any other matters will immediately or in the course of time:

- (a) Interfere with the free flow of sewage in the sewerage system;
- (b) Damage any part of the sewerage system;
- (c) In any way, directly or indirectly, cause the quality of the treated sewage or residual biosolids and other solids from any sewage treatment plant in the catchment to which the waste was discharged to breach the conditions of a consent issued under the Resource Management Act, or water right, permit or other governing legislation;
- (d) Prejudice the occupational health and safety risks faced by sewerage workers;
- (e) After treatment be toxic to fish, animals or plant life in the receiving waters;
- (f) Cause malodorous gases or substances to form which are of a nature or sufficient quantity to create a public nuisance; or
- (g) Have a colour or colouring substance that causes the discharge from any sewage treatment plant to receiving waters to be coloured.

1B.2

A discharge has prohibited characteristics if it has any characteristic which exceeds the concentration or other limits specified in Schedule 1A unless specifically approved for that particular consent.

1B.3

A discharge has a prohibited characteristic if it has any amount of:

- (a) Harmful solids, including dry solid wastes and materials which combine with water to form a cemented mass;
- (b) Liquid, solid or gas which could be flammable or explosive in the wastes, including oil, fuel, solvents (except as allowed for in Schedule 1A), calcium carbide, and any other material which is capable of giving rise to fire or explosion hazards either spontaneously or in combination with sewage;

- (c) Asbestos;
- (d) The following organo-metal compounds:
Tin (as tributyl and other organotin compounds);
- (e) Any organochlorine pesticides;
- (f) Genetic wastes, as follows:
All wastes that contain or are likely to contain material from a genetically modified organism that is not in accordance with an approval under the Hazardous substances and New Organisms Act. The material concerned may be from premises where the genetic modification of any organism is conducted or where a genetically modified organism is processed;
- (g) Any health care waste prohibited for discharge to a sewerage system by NZS 4304 or any pathological or histological wastes; or
- (h) Radioactivity levels in excess of the National Radiation Laboratory Guidelines.