



Terms and Conditions for the Acceptance of Wastewater Drainage 2008

These Terms and Conditions for the Acceptance of Wastewater Drainage define the responsibilities of customers discharging wastewater into the Western Bay of Plenty District Council's wastewater drainage system and explains the procedures and practices which Council will follow to protect the system from damage and contamination and to protect the public health.

The Terms and Conditions are based on the Standards New Zealand model document NZS 9201: Chapter 22 (Int): 1991.

Attention is drawn to the Western Bay of Plenty District Council Wastewater Drainage Bylaw 2008, which should be read in conjunction with these Terms and Conditions.



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Western Bay of Plenty District Council

Terms and Conditions for the Acceptance of Wastewater Drainage

Related Documents

The discharge and acceptance of wastewater is subject to a number of Acts, Regulations, Bylaws, Codes and Standards, the most relevant being as follows –

Statutory Acts and Regulations

Building Act 2004 [BA]
Building Regulations (including the New Zealand Building Code)
Health Act 1956 [HA]
Health and Safety in Employment Act 1992
Land Transfer Act 1952
Local Government Act 2002 [LGA]
Local Government (Rating) Act 2002 [LGRA]
Plumbers, Gasfitters and Drainlayers Acts 1976 and 2006
Property Law Act 1952
Resource Management Act 1991 [RMA]

Codes and Standards

Western Bay of Plenty District Council Trade Wastes Bylaw
New Zealand Building Code [NZBC]
NZS 3604: Timber Framed Buildings
NZS 9201 Model General Bylaws, Chapter 22(Int): 1999, Wastewater Drainage
NZS 9201, Model General Bylaws, Chapter 23 (Int):1995, Trade Wastes
Western Bay of Plenty District Council Code of Practice for Land Development and Subdivision

Scope

The following Terms and Conditions relating to the acceptance of wastewater from customers of the Western Bay of Plenty District Council are made under the authority of the Health Act 1956, and the Local Government Act 2002.

Attention is drawn to the Western Bay of Plenty District Council Wastewater Drainage and Trade Wastes Bylaws both of which should be read in conjunction with these Terms and Conditions.

In general this document and the bylaws only cover matters which are not the subject of statute or regulation. However, in order to give a clearer picture for property owners and/or occupiers seeking guidance on wastewater drainage matters, in some cases the relevant legislative provisions are given.

For a clearer understanding of the Council's powers, and the occupier's or landowner's responsibilities in respect to sewerage, stormwater drainage, and the disposal of trade wastes, please also refer to the Local Government Act 2002.

Definitions

For the purpose of these Terms and Conditions and unless inconsistent with the context, the definitions in the Wastewater Drainage Bylaw 2008, the Trade Wastes Bylaws 2008 and Chapter 1, Introduction, of the General Bylaw 2008 apply.



Western Bay of Plenty District Council

Wastewater Drainage System Terms and Conditions for the Acceptance of Wastewater

1. Introduction

- 1.1 These Terms and Conditions for the Acceptance of Wastewater cover matters relating to the Western Bay of Plenty District Council's wastewater drainage system.

Objective

The purpose of these Terms and Conditions is to complement the Bylaw in its objects to regulate the use of and protect Council's wastewater drainage system from damage and misuse and to promote and protect the public health.

Policy

The Council is under no obligation to accept wastewater drainage at an instantaneous or daily flow rate exceeding the rate determined by Council.

Supply

The Council does not guarantee to receive wastewater without interruption or to receive wastewater discharge at a level in excess of the amount agreed between Council and the customer.

- 1.2 Matters regulating the acceptance of trade waste into the wastewater drainage system are contained in the Western Bay of Plenty District Council Trade Wastes Bylaw.

2. Wastewater Discharges

2.1 Acceptance and Duration

- 2.1.3 In general only wastewater complying with the nature and levels of the characteristics stipulated in the First Schedule to these Terms and Conditions may be discharged in to the wastewater drainage system. However in some special circumstances Council may agree to accept wastewater which does not comply with those characteristics subject to compliance with any conditions stipulated by Council as part of that approval.
- 2.1.4 Any person who is discharging wastewater into Council's wastewater drainage system at the date that Council formally adopts these Terms and Conditions, or who subsequently makes application to so discharge, is deemed to accept the Terms and Conditions applicable at the time of application and to be bound by any later amendments to those Terms and Conditions.
- 2.1.5 If the customer does nothing to jeopardise the integrity of the wastewater drainage system the Council will continue to accept wastewater from domestic premises once an approved connection has been made to the public sewer.



2.2 Limits on Discharge

- 2.2.1 Domestic wastewater, being liquid wastes discharged from premises used solely for domestic residential activities (or wastes of the same character discharged from other premises) will be accepted provided that the character of the wastewater makes it an acceptable discharge. Such wastewater may include the draining of domestic swimming and spa pools subject to a maximum discharge restriction.
- 2.2.2 Customers with swimming or spa pools will be required to demonstrate that the pool drain has been fitted with a flow limiting device to ensure that the discharge does not exceed the maximum instantaneous flow requirement of 2.0 litres/sec, except for pumped connections which require special discharge conditions.
- 2.2.3 Wastewater from any source must not be discharged into the sewer at an instantaneous flow rate exceeding 2.0 litres per second (see Clause 3.7), except for pumped connections which require special discharge conditions.

2.3 Prohibited Characteristics

Wastewater which contains the prohibited characteristics specified in the Second Schedule to these Terms and Conditions must not be discharged into the Council sewer.

2.4 Prevention of Inflow and Infiltration

Customers must make sure that stormwater does not enter the wastewater system by ensuring that –

- (a) there is no direct connection of any stormwater pipe or drain to the wastewater system;
- (b) the gully trap surrounds are set above stormwater ponding levels or secondary overland flow path flood levels;
- (c) inspection covers are in place and are appropriately sealed.

Note: for trade premises where stormwater cannot be separated from wastewater please refer to the Western Bay of Plenty District Council Trade Wastes Bylaw.

2.5 Entitlement to Service

- 2.5.2 Subject to the provisions of S459(7) of the Local Government Act 1974, property owners are required to connect to a sewer within 18 months of service becoming available to a property, provided however that the owner may apply to Council for exemption from such requirement when there are special circumstances.

2.6 Domestic/Trade Related Premises

Where part of a dwelling house is used as an office, or other trade related activity from which no trade waste could be produced, and which no other persons apart from those living at those premises use, then it will be treated as domestic premises. Any trade activity which produces, or has the potential to produce a wastewater will be treated as being from trade premises.

2.7 Flow Rate

In general wastewater must not be discharged into the sewer at an instantaneous flow rate exceeding 2.0 litres per second. However Council may, where it considers it necessary to do so, stipulate a maximum daily flow rate which can be discharged from any premises into the wastewater drainage system at any time and at any point of discharge. Pumped connections require special delivery conditions which are assessed on a case by case basis, and are as agreed with the customer.



2.8 Waste Minimisation

In order to reduce the amount of water used for domestic purposes, and to lower the volume of wastewater discharged into the system from the premises, Council recommends that customers fit water conservation devices such as dual flush toilet cisterns and low flow shower heads on all new installations.

2.9 Change of Ownership

In the event of domestic premises changing ownership the new owner of the property will automatically become a customer of the Council wastewater drainage system and be subject to these Terms and Conditions.

3. Conditions of Service

3.1 Application

3.1.1 Every application for a domestic wastewater service connection must be made in writing on the standard form and be lodged with the Council together with the prescribed fee. The applicant must provide all the details required by the Council.

3.1.2 An application must be made whether or not a public sewer has already been laid up to the point of discharge.

3.1.3 The fees and charges payable in respect to the service connection and the discharge of wastewater and related services will be in accordance with the current Council schedule of rates and charges.

3.2 Construction of New Public Sewer Connection

Where an application has been accepted by the Council which requires a new public sewer connection to be constructed from the existing public sewer to the point of discharge, the customer is required to arrange for the connection to Council's system with the work to be undertaken, under permit, by a currently registered drain layer.

3.3 Subdivision

Where a new public sewer is required as part of a subdivisional development, the developer must provide all the drainage works subject to –

- (a) approval of Council with respect of the design;
- (b) the construction of the works in accordance with the District Plan; and
- (c) compliance with the Council's Code of Practice for Land Development and Subdivision.

4. Point of Discharge

4.1 General

4.1.1 Subject to the provisions of S459 (7) of the Local Government Act 1974, the point of discharge from a customer shall be the point on the public sewer which marks the boundary of responsibility between the customer and the Council irrespective of property boundaries. Typical layouts at a point of discharge are shown in Appendix "A" to this document



4.1.2 Unless otherwise approved there will be only one point of discharge for each premises, and any private drain must not be extended by pipe or any other means to serve another premises unless it is a common private drain.

4.2 Single Ownership

4.2.1 For single dwelling units the point of discharge must be located at the point of physical connection to the public sewer, whether it be within a road, other public lands, or private land. Where it considers that it is necessary to do so the Council may approve more than one point of discharge.

4.2.2 The location of all points of discharge must be shown on the District Drainage map which is open to public inspection during normal office hours. Copies of the maps are available on payment of the appropriate fee (see also Clause 5.6).

4.3 Multiple Ownership

4.3.1 The point of discharge for the different forms of multiple ownership of premises and/or land will be as follows:

- (a) for company share/block scheme (body corporate) - as for single ownership;
- (b) for leasehold/tenancy in common scheme (cross lease), strata title, and unit title (body corporate): where practicable each owner must have an individual drain with the point of discharge determined by agreement with the Council.

4.3.2 If it is not practicable to connect at the point of supply described in the foregoing clause the Council may approve a common private drain subject to any conditions it considers fit.

4.3.3 If it is not possible to determine what agreement was originally reached in respect to any particular point of connection it will be treated as a new connection.

4.4 Common Private Drains

Common private drains, which may only serve a maximum of 5 single dwelling units, are allowed to have one point of discharge only.

4.5 Rights Attaching to Land

Where a private drain has been constructed with the consent of all the owners of the lands affected, and it serves separately owned premises, then all of the lands so served have the rights set out in Section 461 of the Local Government Act 1974. Those rights are registered against the titles of all the other lands so served by way of a certificate given to the District Land Registrar by the Council. The Council charges in this respect are set out in the current Schedule of Rates and Charges.

4.6 Drainage Maps

4.6.1 The Council is required to prepare a map showing the course and levels of all covered drains made for the efficient drainage of the District and to record any new or changed drains on that map.

4.6.2 The point of discharge of each property must be approved by the Council and recorded on the drainage map.

4.6.3 The drainage map is open to public inspection during normal business hours at the office of the Council and copies may be obtained on payment of the required fee.



5. Continuity of Services

5.1 Levels of Service

The Council will provide wastewater services in accordance with the level of service contained in the Council Annual Plan or the Council Asset Management Plan. For those periods where the level of service allows non-compliance with specified value(s) the Council will make every reasonable attempt to achieve the specified value(s).

5.2 No Guarantee of Service

The Council does not guarantee to receive wastewater without interruption, or to receive wastewater discharge at a level or containing characteristics in excess of the amount agreed between Council and the customer, but it will take all reasonable steps to meet the service levels set out in clause 6.1 above.

5.3 No Liability

The Council will not accept liability for any loss, damage, or inconvenience which the customer, or any person using the service, may sustain as a result of deficiencies in, or interruptions to, the collection, treatment, and disposal of wastewater.

6. Disconnection

6.1 Demolition/Removal of Building

6.1.1 A customer must give seven (7) working days notice in writing of his or her intention to demolish or remove a building connected to the sewer and the demolition or removal must not commence until the Council has disconnected the property from the sewer.

6.1.2 The Council's reasonable costs in making the disconnection will be recoverable from the property owner or the person demolishing or removing the building.

6.2 Disconnection of Discharge Connection

A customer must give two (2) working days notice in writing to the Council of their need to have the discharge pipe disconnected if a private drain is to be relayed.

7. Emergencies

7.1 Natural Hazards

Natural hazards (such as floods or earthquakes), or accidents beyond the control of the Council which result in disruptions to the ability of the Council to receive wastewater, will be deemed to be an emergency and exempted from the levels of service requirements of clause 6.1 above.

7.2 Prohibition on Discharge

7.2.1 During an emergency the Council may restrict or prohibit the discharge of wastewater for any specified purpose, for any specified period, and for any or all of its customers. Such restrictions will be publicly notified at the first available opportunity and by whatever method is likely to be the most effective in the circumstances.



- 7.2.2 The decision to make and lift restrictions will be made by the Council or, where immediate action is required, by the Council officer who has been authorised for that purpose, subject to subsequent ratification by the Council.

8. Maintenance, Repair and Inspection

8.1 General

The Council will make every reasonable attempt to notify the customer of any shutdown of the wastewater drainage system, which is not the result of an emergency, before any work commences or the shutdown occurs. However where immediate action is required, and it is not possible to notify the customer of the interruption to service, Council may close down the point of discharge without notice but the customer will be advised as soon as possible of the shutdown and the likely time that the service will resume.

8.2 Access for Inspection

The customer must allow the Council, its contractors, or its agents, along with their equipment, access to and about the point of discharge at any time for the purpose of monitoring, testing, and maintenance work on the sewer.

Note: for routine work the current Council policy is to give 24 hours' notice and to carry out the work between 7.30am and 6.00pm.

8.3 Non-Complying Connections

The *customer* must provide the *Council*, its contractors, or its agents, along with their equipment, access at any time to any area of the *customer's* premises for the purposes of determining compliance with the Council's Terms and Conditions applicable to the customers premises.

8.4 Blockages

- 8.4.1 A customer who becomes aware that a gully trap is overflowing or has other reasons to suspect a blockage has occurred in the drainage system, must immediately contact the Council.

- 8.4.2 The Council or its agent will check the manholes both upstream and downstream of the customer's connection. If it is found that the public sewer line is clear, then the customer will be notified immediately that the blockage is within their private line and be advised to engage a registered drainlayer to clear the blockage.

- 8.4.3 If the blockage is within the public sewer the Council will clear the obstruction and clean up the affected area.

9. Working Near Buried Services

9.1 Check for Buried Services

Before any work is undertaken in or around any part of the wastewater drainage system the drainage maps maintained by the Council should be checked to find the location of buried services.

As noted earlier the maps are available for public inspection during normal business hours at no cost to the user. Reasonable charges will be levied to cover the costs of making copies available.



9.2 Building Near Buried Services

- 9.2.1 If any person intends to carryout any work in a location which is likely to require Council's drainage works to be diverted or altered that person must give Council sufficient notice of his/her proposals to allow Council staff adequate time to investigate and assess the proposed work.
- 9.2.2 If the Council is satisfied that it is practicable and reasonable for the drainage works to be diverted or altered, the Council may enter into an agreement with that person as to the manner in which the drainage works will be carried out.
- 9.2.3 The cost of the work required, in terms of the foregoing clause, together with the costs of any other incidental costs which the Council may incur in respect to such work, will be charged to the person requesting the work.

9.3 Excavation or Building Near Public Sewers

No person may carryout excavating, piling, or similar work over or adjacent to any rising main or trunk sewer without written Council approval and only then in accordance with any condition that Council may impose on any such approval.

Note: In general Council will not allow a building to be constructed within 2.0 metres measured horizontal from the centre of any public sewer, or within 5.0 metres measured horizontal from the centre of any rising main. However each application will be considered on its merits and where circumstances warrant such action, the application will be referred to Council for a decision. Any application to build in close proximity of a public sewer, being the area defined above, should be lodged with the Council early in the planning process and will be considered in accordance with the guidelines contained in the Third Schedule to this document.

9.4 Damage to System

Any damage which occurs to a Council service during excavation or other work must be reported to the Council immediately. The cost of any repair work incurred by the Council in reinstating any part of the drainage system which has been damaged as a result of negligence may be recovered from the person or persons responsible.

10. Customer's Drainage System

10.1 General

The customer's drainage system is governed by the Building Act from inside the building to the point of discharge.

Customers with discharges from premises not covered by the Building Act and the New Zealand Building Code must nevertheless have a drainage system which complies with the Building Act and Code.

10.2 Private Drains to be Free of Defects

Private drains must be kept in sound condition and should be maintained in a way that they are free from cracks and other defects which may allow infiltration.

10.3 Pump Stations

Private wastewater pump stations will be approved only where there are no practical alternatives for a gravity flow discharge to the public sewer. These will be subject to special discharge conditions.



11. Payment

11.1 Level of Charges

The fees and charges applicable to the provision of wastewater discharge and related services will be in accordance with the current Council schedule of rates and charges.

11.2 Setting of Fees and Charges

The Western Bay of Plenty District Council may from time to time amend the fees and charges applicable to the provision of wastewater drainage services.

Amendments to the schedule of rates and charges and the terms under which they may be applied are generally made when the Western Bay of Plenty District Council Annual Plan is adopted each year.

12. Breaches and Remedies

12.1 Breach of Terms and Conditions

The following may be taken by the Council as being a breach of these Terms and Conditions to discharge wastewater into the wastewater drainage system and consequently a breach of the Wastewater Drainage Bylaw –

- (a) an incorrect application to connect which fundamentally changes the intent of the Terms and Conditions relating to the service;
- (b) failure by the customer to meet and comply with the Terms and Conditions applicable to the customer;
- (c) failure to meet any obligation placed on the customer under all current acts and regulations relating to the discharge of wastewater;
- (d) frustration of the Council's ability to adequately and effectively carry out its obligations in terms of the Local Government Act 2002, the Health Act 1956, or any other relevant legislation relating to the discharge of wastewater;
- (e) an act or omission in contravention of the provisions of the Western Bay of Plenty District Council Wastewater Drainage Bylaw.

In the event of a breach of the Terms and Conditions as described above Council may serve notice on the customer advising the nature of the breach and the steps to be taken to remedy that breach. If the customer fails, within seven (7) days of the date of the notice, to take the required action the Council reserves the right to disconnect the service without further notice. In such an event the service will be reconnected only after payment of the appropriate reconnection fee and remedy of the breach to the satisfaction of the Council.

In addition to the foregoing, if the breach is such that Council is required to disconnect the service for health or safety reasons the disconnection may be carried out immediately.

12.2 Penalties

In addition to any legal penalties arising from any breach, offence, or dispute, in terms of the Local Government Act 2002, the Western Bay of Plenty District Wastewater Drainage Bylaw, or any other enactment, Council may seek to recover all costs arising from and associated with any such breach, offence, or dispute.



The Council reserves the right to pursue any legal remedy available to it pursuant to the provisions of the Local Government Act 2002, or any other act or regulation.

12.3 Failure to Pay

Any money owing, outstanding and unpaid for charges and rates for wastewater services becomes a charge on the land.

13. Right to Vary

Council may vary these Terms and Conditions from time to time by way of an ordinary resolution publicly notified.



First Schedule: Acceptable Discharge Characteristics

1. Introduction

- 1.1 The nature and levels of the characteristics of any wastewater discharged to the Council system must comply at all times with the following requirements, except where the nature and levels of such characteristics are varied by the Council as part of an approval to discharge a wastewater.
- 1.2 The Council must take into consideration the combined effects of wastewater discharges and may make any modifications to the following acceptable characteristics for individual discharges the Council believes are appropriate.
- 1.3 The nature and levels of any characteristic may be varied to meet any new resource consents or other legal requirements imposed on the Council.

2. Physical Characteristics

		Explanatory Comments
2.1.	<i>Flow</i>	
(a)	The 24 hour flow volume must be less than 5 m ³ .	Flows larger than the guideline values should be a "controlled" or "conditional" trade waste consent.
(b)	The maximum instantaneous flow rate must be less than 2.0 L/s except for pumped connections which require special discharge conditions.	
2.2	<i>Temperature</i> The temperature must not exceed 40 °C.	Higher temperatures: <ul style="list-style-type: none">- cause increased damage to sewer structures.- increase the potential for anaerobic conditions to form in the wastewater.- promote the release of gases such as H₂S and NH₃.- can adversely affect the safety of operations and maintenance personnel.
2.3	<i>Solids</i>	
(a)	Non-faecal gross solids must have a maximum dimension which must not exceed 15 mm and gross solids must have acquiescent settling velocity which must not exceed 50 mm/minute.	Gross solids can cause sewer blockages.
(b)	The suspended solids content of any wastewater must have a maximum concentration which must not exceed 350 g/m ³ .	High suspended solids contents can cause sewer blockages and overload the treatment processes.
(c)	The settleable solids content of any wastewater must not exceed 50 ml/L.	
(d)	The total dissolved solids concentration in any wastewater must 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.	High total dissolved solids reduces effluent disposal options and may contribute to soil salinity. Where potential for such problems exists, a limit of 10,000 g/m ³ may be used as a guideline.



3. Chemical Characteristics

Explanatory Comments	
	<p>In the setting of restrictions for chemical characteristics the Council must be mindful of the production of harmful or noxious waste streams from some tests, such as chemical oxygen demand and total Kjeldahl nitrogen. The need to set such restrictions and therefore the requirement to undertake the associated testing must be determined by the Council.</p>
<p>3.1 pH value The pH must be between 6.0 and 9.0 at all times.</p>	<p>Extremes of pH:</p> <ul style="list-style-type: none"> - can adversely affect biological treatment processes. - can adversely affect the safety of operations and/or maintenance personnel. - cause corrosion of sewer structures. - increase the potential for the release of toxic gases such as H₂S and HCN. <p>Relaxation of these limits to 5.5 and 11.0 is acceptable for low volume premises which discharge into a large flow.</p>
<p>3.2 Organic strength</p> <p>3.2.1 The Biochemical Oxygen Demand (BOD) of any waste must not exceed 400g/m³. If the BOD is greater than this limit the wastewater must be treated as a trade waste.</p>	<p>Biochemical Oxygen Demand (BOD) rather than Chemical Oxygen Demand (COD) affects the loading on a treatment plant. For any particular waste type there is a fixed ratio between COD and BOD. For domestic wastewater it is about 2.5:1 (COD: BOD), but can range from 1:1 to 100:1 for trade waste. Therefore BOD is important for the treatment process and charging, but because of the time taken for testing, it is often preferable to use COD for monitoring.</p> <p>However, the use of COD testing must be balanced by the possible environmental effects of undertaking such tests due to the production of chromium and mercury wastes. Where a consistent relationship between BOD and COD can be established the discharge may be monitored using the COD test.</p> <p>If the treatment plant BOD capacity is not limited, and sulphides are unlikely to cause problems, there may be no need to limit BOD. High COD may increase the potential for the generation of sulphides in the wastewater.</p> <p>A BOD limit which is too stringent may require the installation of pretreatment systems by some occupiers, imposing unnecessary costs because the most cost effective treatment method is likely to be the Council treatment plant</p>



Explanatory Comments

<p>3.3 Maximum concentrations</p> <p>3.3.1 Introduction The maximum concentrations permissible for the chemical characteristics of an acceptable discharge are set out in the following tables:</p> <p>General chemical characteristics Table 1 Heavy metals..... Table 2 Organic compounds..... Table 3</p> <p>Where appropriate, maximum daily limits (kg/day) for mass limit controlled discharges are also given.</p>			
<p>3.3.2 General chemical characteristics</p>			
<p>Table 1 - General chemical characteristics</p>			
Characteristic	Maximum concentration	Mass limit (kg/day)	
MBAS (Methylene blue active substances)	500 g/m ³		MBAS is a measure of anionic surfactants. High MBAS can: <ul style="list-style-type: none"> - adversely affect the efficiency of activated sludge plants. - impair the aesthetics of receiving waters.
Ammonia (measured as N)			High ammonia: <ul style="list-style-type: none"> - may adversely effect the safety of operations & maintenance personnel. - may significantly contribute to the nutrient load to the receiving environment.
free ammonia	50 g/m ³		
ammonium salts	200 g/m ³		
Characteristic	Maximum concentration	Mass limit (kg/day)	
Kjeldahl nitrogen	150 g/m ³		High Kjeldahl nitrogen may significantly contribute to the nutrient load of the receiving environment. A value of 150 g/m ³ should be used as a guideline for sensitive receiving waters.
Total phosphorus (as P)	50 g/m ³		High phosphorus may significantly contribute to the nutrient loading of the receiving environment. A value of 50 g/m ³ should be used as a guideline for sensitive receiving waters.
Sulphate (measured as SO ₄)	200 g/m ³		Sulphate: <ul style="list-style-type: none"> - may adversely affect sewer structures. - may increase the potential for the generation of sulphides in the wastewater if the sewer is prone to become anaerobic.
Sulphite (measured as SO ₂)	10 g/m ³		Sulphite has potential to release SO ₂ gas and thus adversely affect the safety of operations & maintenance personnel. It is a strong reducing agent and removes dissolved oxygen thereby increasing the potential for anaerobic conditions to form in the wastewater.



Explanatory Comments

Sulphide as H ₂ S on acidification	1 g/m ³	Sulphides in wastewater may: <ul style="list-style-type: none"> - cause corrosion of sewer structures, particularly the top non-wetted part of a sewer. - generate odours in sewers which could cause public nuisance. - release the toxic H₂S gas which could adversely affect the safety of operations & maintenance personnel. 																																									
Chlorine (measured as Cl ₂) free chlorine hypochlorite	3 g/m ³ 30 g/m ³	Chlorine: <ul style="list-style-type: none"> - can adversely affect the safety of operations & maintenance personnel. - can cause corrosion of sewer structures. 																																									
Dissolved aluminium	100 g/m ³	Aluminium compounds, particularly in the presence of calcium salts, have the potential to precipitate as a scale which may cause a sewer blockage.																																									
Dissolved iron	100 g/m ³	Iron salts may precipitate and cause a sewer blockage. High concentrations of ferric iron may also present colour problems depending on local conditions.																																									
Boron (as B)	25 g/m ³	Boron is not removed by conventional treatment. High concentrations in effluent may restrict irrigation applications. Final effluent use and limits should be taken into account.																																									
Bromine (as Br ₂)	5 g/m ³	High concentrations of bromine may adversely affect the safety of operations & maintenance personnel.																																									
Fluoride (as F)	30 g/m ³	Fluoride is not removed by conventional wastewater treatment, however pre-treatment can easily and economically reduce concentrations to below 20 g/m ³ .																																									
Cyanide weak acid dissociable (as CN)	1 g/m ³	Cyanide may produce toxic atmospheres in the sewer and adversely affect the safety of operations & maintenance personnel.																																									
3.3.3 Heavy metals¹																																											
Table 2 - Heavy metals¹																																											
<table border="1"> <thead> <tr> <th>Metal</th> <th>Maximum concentration (g/m³)</th> <th>Metal</th> <th>Maximum concentration (g/m³)</th> </tr> </thead> <tbody> <tr> <td>Antimony</td> <td>10</td> <td>Manganese</td> <td>20</td> </tr> <tr> <td>Arsenic</td> <td>5</td> <td>Mercury</td> <td>0.05</td> </tr> <tr> <td>Barium</td> <td>10</td> <td>Molybdenum</td> <td>10</td> </tr> <tr> <td>Beryllium</td> <td>0.005</td> <td>Nickel</td> <td>5</td> </tr> <tr> <td>Cadmium</td> <td>0.5</td> <td>Selenium</td> <td>10</td> </tr> <tr> <td>Chromium</td> <td>5</td> <td>Silver</td> <td>2</td> </tr> <tr> <td>Cobalt</td> <td>10</td> <td>Thallium</td> <td>10</td> </tr> <tr> <td>Copper</td> <td>5</td> <td>Tin</td> <td>20</td> </tr> <tr> <td>Lead</td> <td>5</td> <td>Zinc</td> <td>5</td> </tr> </tbody> </table>	Metal	Maximum concentration (g/m ³)	Metal	Maximum concentration (g/m ³)	Antimony	10	Manganese	20	Arsenic	5	Mercury	0.05	Barium	10	Molybdenum	10	Beryllium	0.005	Nickel	5	Cadmium	0.5	Selenium	10	Chromium	5	Silver	2	Cobalt	10	Thallium	10	Copper	5	Tin	20	Lead	5	Zinc	5	Heavy metals have the potential to: <ul style="list-style-type: none"> - impair the treatment process - impact on the receiving environment - limit the reuse of sludge and effluent. 		
Metal	Maximum concentration (g/m ³)	Metal	Maximum concentration (g/m ³)																																								
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Lead	5	Zinc	5																																								



3.3.4 <i>Organic compounds</i>	
Table 3 - Organic compounds	
Organic Compounds must not exceed the acceptable levels as laid out in the Drinking Water Standards for New Zealand 1984 (Board of Health) [ditto, as above]	

Second Schedule – Prohibited Characteristics

1. Introduction

Prohibited characteristics are present if their concentration exceeds background levels. The background level in relation to any substance means the extent to which that substance is present (if at all) in the public water supply used on the trade premises, or in any other water supply that is approved by the Council for the purpose of discharging waste.

2. Prohibited Characteristics

2.1 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 or may immediately or in the course of time –

- (a) Interfere with the free flow of sewage in the wastewater system, or
- (b) Damage any part of the wastewater system, or
- (c) In any way, directly or indirectly, cause the quality of the effluent or residual biosolids and other solids from any wastewater treatment plant in the catchments to which the waste was discharged to breach the conditions of a consent issued under the Resource Management Act 1991, or water right, permit or other governing legislation, or
- (d) Prejudice the occupational health and safety risks faced by sewerage workers, or
- (e) After treatment be toxic to fish, animals or plant life in the receiving waters, or
- (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 of any wastewater treatment plant to receiving waters to be coloured.

2.2 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.

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

- (a) 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 1), 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)
 - Chromium (as organic compounds)
- (e) Any organochlorine pesticides;
- (f) Genetic wastes, as follows:

All wastes that contain or are likely to contain genetically altered material from premises where the genetic alteration of any material is conducted.
- (g) Any health care waste covered by NZS 4304 or any pathological or histological wastes.
- (h) Radioactivity levels in excess of National Radiation Laboratory guidelines.



Third Schedule – Rules for Building In Close Proximity to Public Sewers [Are these still applicable as is, given that they were adopted in 1997 and we now have a new Building Act?]

(Adopted by Council 22 May, 1997)

a) **Rising Mains and Trunk Sewers**

No building shall be built over a trunk sewer (greater than 150mm internal diameter) or sewer rising main, or closer than the greater of –

- a) 1.5 metres from the center of any rising main or trunk sewer, or
- b) The depth of the sewer invert from the ground surface.

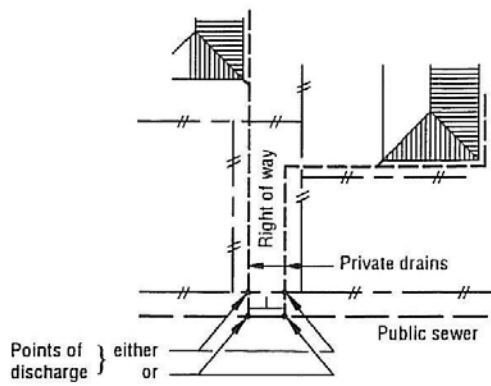
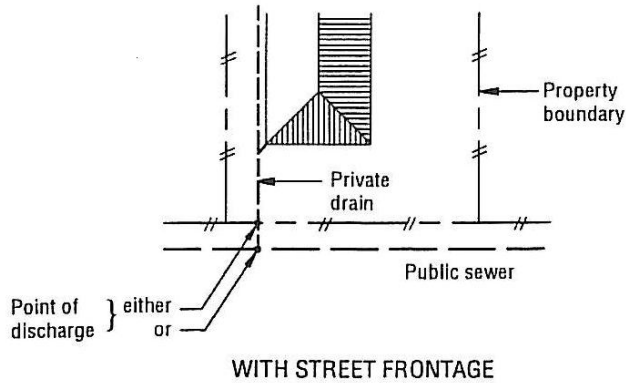
b) **Other Public Sewers (150mm internal diameter or less)**

- a) No dwelling shall be built over a public sewer whether on public or private land, except for (d) below.
- b) No dwelling shall be built closer than the greater of –
 - i) 1.5 metres from the center of any public sewer; or
 - ii) the depth of the sewer invert from the ground surface
- c) Subject to approval, a developer may meet the cost of diverting the public sewer around a proposed dwelling site (including any manholes required) in accordance with Council standards).
- d) The Council may allow detached non-inhabited ancillary buildings (such as garages, carports, sheds), to be built over a sewer subject to –
 - i) there being no sewer connections or manholes under the building or within 1.5 metres of the edge of the building.
 - ii) the developer constructing the building foundations so that no building loads are transferred to the sewer.
 - iii) registering the public sewer by a Memorandum of Encumbrance and Deed of Covenant against the Certificate of Title prior to the building construction commencing.
- e) Commercial and industrial buildings may only be built over a public sewer subject to Council approval.

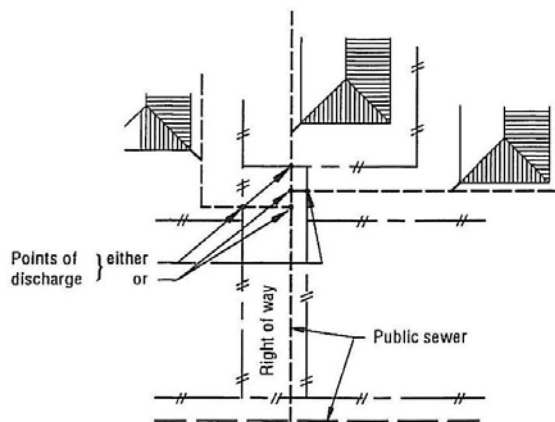


Appendix A

Typical Point of Discharge Locations (Clause 5.1.1 refers)



REAR LOTS ON RIGHT OF WAY (up to 2 customers)



REAR LOTS ON RIGHT OF WAY (3 or more customers)

