

DS6 - Wastewater

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DS6 Wastewater

6.1 General Design Standards

- i. Hydraulic design of all reticulation shall be such that maximum design flows can be accommodated with no surcharging into pipes or manholes.
- ii. The design shall incorporate storage where necessary in accordance with the Wastewater Pump stations and rising mains section of this Code.
- iii. The consent applicant shall demonstrate that :
 - The downstream reticulation capacity is sufficient to receive the additional proposed sewage loadings from the proposed development.
 - The provisions of District Plan Rule 15.6.4.1 have been considered.
- iv. Council will provide available data for public drain capacities.
- v. All sanitary sewer systems shall be designed to inhibit direct stormwater entry into the system and pumping stations.
- vi. The Council sanitary sewer system shall be constructed with a minimum 150mm dia pipe. All other reticulation is deemed to be private and shall be covered by appropriate easements.
- vii. Manholes are required at each change of grade or direction, and the upper end of all Council sewer lines (excluding connections). Manhole spacings shall not exceed 100m.
- viii. Greater spacings may be approved for larger diameter pipelines. Each branch line (excluding connections) shall join the main at a manhole.
- ix. The property connection should be designed to suit the existing situation and any future development.
- x. Where practicable, pipes shall be designed to provide a service for the whole of the property they serve. Where, for physical reasons, it is not practical to fully service a property, a partial service may be acceptable to Council provided the unserviceable area is identified by a building line restriction or minimum floor level consent notice.

6.1.1 Calculation of Flows

Wastewater flows are a function of water consumption, infiltration and direct ingress of stormwater, which in turn are a function of the age of the system and the quality of maintenance.

6.1.2 Design Flows

i. Residential Flows

Residential flows shall be calculated on the following basis:

- a. Population based on 3 people per house or dwelling unit.
- b. Average Dry Weather Flow (ADWF) of 220l/person/day in urban areas serviced by a Council water supply.
- c. A peaking factor of 5 (Including allowance for wet weather).
- d. For design populations of 1000 people or more, a reduced peaking factor may be discussed and agreed with the Authorised Officer.
- ii. Industrial and Trade Flows

Where the industrial waste and trade waste flows from a particular industry are known, these shall be used as the basis for the sanitary sewer systems design. When the above information is not available, the following table 6.1 shall be used as a design basis:

Industry Type (Water Usage)	Minimum Design Flow (litres/second/hectare)
Light Development	0.4
Medium Development	0.7
Heavy Development	1.3

Table 6.1

(Note: These figures include both normal sanitary sewage and trade wastes and include a peaking factor of 5 times ADWF)

iii. Hotels/Motels, Camping Grounds and Restaurants

Where the specific flows from a Hotel, Motel, Camping Ground or Restaurant are known these shall be used as a basis for the sewer design. When the above information is not available the following table 6.2 shall be used as a design basis.



Source	Minimum Design Flow (litres/person/day)
Hotels/Motels/Camping Ground	
- guests, resident staff	220
- non-resident staff	49
- reception rooms	37
- bar trade (per customer)	31
- restaurant (per diner)	37
Restaurants (per diner)	
- dinner	37
- lunch	31
Tearooms (per diner)	
- without restroom facilities	18
- with restroom facilities	31

Table 6.2

(Note: these figures do not include peaking factors)

iv. Institutions and Community Buildings

Where the specific flows from an Institution or Community Building are known, these shall be used as a basis for the sewer design. When the above information is not available, the following table 6.3 shall be used as a design basis:

Source	Minimum Design Flow (litres/person/day)
Community Halls	
- banqueting	37
- meetings	18
Marae	
- day only visitors	49
- day plus overnight visitors	183
Schools (pupils plus staff)	49
Public toilets (including handwash) ¹	12

Table 6.3

(Note - these figures do not include peaking factors).

¹ Aggregate value applied to total daily visitor numbers.

Wastewater flow allowances from areas zoned for commercial uses or for hotels, motels, camping grounds or restaurants shall be the same as for residential areas. Where the



surrounding residential zoning is for higher density residential, then the flow allowances for the commercial areas shall be the same as for the adjacent residential high density area.

6.1.3 Hydraulic Design

- i. The hydraulic design of sanitary sewer pipelines shall be based on tables for the hydraulic design of stormwater drains, sewers and pipelines, or on graphs or other representation of the same methods, based on the Colebrook White or Manning formula.
- ii. The pipe roughness coefficient Ks used in the design shall be 1.5mm as an overall coefficient that allows for joints shown in the following table.

6.1.4 Minimum Grades for Self-Cleaning

Self-cleaning of grit and debris shall be achieved by providing minimum grades, as specified in Tables 6.4 and 6.5.

Pipe size	Minimum grade
DN	(%)
150	0.55
225	0.33
300	0.25

Table 6.4: Minimum grades for wastewater mains

Situation	Minimum grade
	(%)
DN 100 lateral pipes	1.65
DN 150 lateral pipes	1.20
Bigger than 150	1 .00

Table 6.5: Minimum grades for connections and permanent upstream ends

Where the normal velocity and gradient limits as defined above cannot possibly be complied with the Authorising Officer may require certain additional works to ensure satisfactory operation of the system.

Maximum Velocity:

The preferred maximum velocity for peak wet weather flow is 3.0 m/s. Where a steep grade that will cause a velocity greater than 3.0 m/s is unavoidable Specific design will be required with approval from Council.



6.2 Specific Design Requirements

6.2.1 Piped Reticulation System Minimum Requirements

Table 6.6: Minimum pipe sizes for Council sanitary sewer system and connections to Property

Pipe	Minimum size
Connections servicing 1 or 2 dwelling units	100
Connections servicing more than 2 dwelling	150
Connections servicing commercial and	150
Industrial lots	150
connections to dwelling units.	100
Road crossings	150

- i For infill subdivisions, particularly where upgrading of existing DN 100 connections in sound condition and at reasonable grades would be impractical, up to four dwelling units may be connected subject to the Council approval.
- ii. Limitation on Pipe Size Reduction: In no circumstances shall the pipe size be reduced on any downstream section.
- iii. All pipe installations shall be designed to the manufacturer's specification and this Code.

6.2.2 Reticulation Layout

The layout of the piped reticulation shall be contained in public land wherever possible, and be in accordance with the drawings.

The levels and locations of all Council sanitary sewer system pipelines shall conform with Council's overall plan for reticulation in accordance with this Code. Provision must be made for connection into the existing reticulation system.

6.2.3 Pipe Locations

Pipes should be positioned as follows:

- i. Within the road reserve in accordance with the Drawing. Pipes should be located clear of all carriageways where possible.
- ii. Within public land with the permission of Council.



6.2.4 Manhole Structure Locations

Manholes are to be located clear of all boundary lines and at the end of all Council sanitary sewer systems. Manholes should be located on Council property or road reserves whenever possible.

6.2.5 Pipe Materials and Definitions

Pipes and fittings for wastewater pipelines shall conform with the Standard technical Specifications.

- i. Trunk mains A gravity pipeline with an internal diameter of 225mm or larger.
- ii. Reticulation main/lateral A gravity pipeline with an internal diameter of 150mm which terminates upstream at a manhole.
- iii. Connection A 100mm privately owned pipeline branch which has no terminal manhole structure. It may however terminate in a rodding eye. Connection pipes connect a property's private drainage to a Council sanitary sewer system.
- iv. Connection Point The location where a property's connection meets the Council's sanitary sewer system. The connection point is maintained by Council from the reticulation system to a point 1m inside the property boundary. In cases where the Council sanitary sewer system is protected by an easement in gross, Council maintains the connection point from the reticulation system to a point 1m outside the easement.

In potentially unstable ground, or where special protection is required, the pipeline shall be specifically designed, including choice of materials.

Concrete-lined steel or concrete-lined ductile iron pipes shall be used where additional strength is required.

6.2.6 Minimum/Maximum Cover over Pipelines

For pipes located within private property:

- The minimum cover shall be 600mm
- The maximum cover shall be 3m unless specific approval is given by Council

Where the reticulation lines are located in the front yards of lots, the invert level shall be deep enough so as not to interfere with any future driveway construction.

Under Carriageways and Road Reserves:

Pipes shall be specifically designed to support an 8.2t design axle load. Manufacturer's certification shall be required for all pipes under carriageways with less than 900mm cover.

6.2.7 Steep Grades

Scour blocks and trench stop configuration shall be detailed on the design drawings and shall be in accordance with the drawings. Spacing of scour blocks shall be in accordance with the following table 6.7:

Grade %	Requirement	Spacing (S) (m)
15 – 35	Concrete bulkhead	S = 100/Grade (%)
>35	Special design	Refer to Council

NOTE: On flat grades where scour is a problem, sand bags are often used to stabilise the trench backfill. Where the natural transfer of water from the trench into the surrounding ground will not provide sufficient drainage, trench drainage shall be provided to divert the water.

Table 6.7

6.2.8 Venting

In urban developments pipes will normally be adequately ventilated within private property drainage via the terminal vent stacks. However there are some situations where additional vent stacks maybe required. Specific engineering design approval from Council is required. These are as follows:

- Pumping stations
- Manholes where rising mains discharge to a gravity pipe.

6.3 Service Connections

6.3.1 General

Before connection to Council wastewater services (connection for a dwelling to a sewer main), the Council connection process and form shall be completed.

6.3.2 Connections

The general levels and locations of all wastewater pipes shall conform with Council's overall plan for reticulation. Provision must be made for connection into the existing reticulation system. The following design considerations shall also be met.

i. Where practicable and where connection is to be within 5m of a manhole the connection shall be to the manhole.



- ii. Where Council sanitary sewer system is within public property and within 5m of the property boundary a separate connection shall be provided to each allotment.
- iii. Connections to Council sanitary sewer system trunk mains will generally not be approved by Council.

6.3.3 Subdivision of 4 Lots or More

Minimum pipe sizes are 150mm diameter nominal size for Council sanitary sewer system and 100mm diameter nominal size for connections.

6.3.4 Infill Subdivision - Three Lots or Less (Excludes Existing Lot)

It is recognised that infill subdivisions require flexibility in their reticulation layout. However, normal trade practices and standards are needed to ensure that the desired service life is achieved.

Reticulation of infill subdivisions shall comply with the following criteria.

- i. Infill subdivisions are to be reticulated on a site by site basis to the approval of the Authorised Officer and in accordance with this Code.
- ii All private drainage reticulation that has been upgraded in accordance with this Code shall be declared public and provide each allotment with the same standard of individual connection as new 'greenfields' allotments.
- Iii Where the main is within a neighbour's property, the new junction may be installed immediately within the property being subdivided with the neighbour's consent and appropriate easements placed over the connection.

6.3.5 Multi-Unit Properties (Such as Apartment Buildings and Body Corporate Developments)

- i. For multiple occupancies (unit title, cross lease or company lease), service of the whole property shall be achieved by providing a single point of connection to the Council sanitary sewer system. Connection of the individual units is by joint service pipes owned and maintained by the body corporate, tenants in common or the company as the case may require. In this instance the whole of the multiple occupancy shall be regarded as a single lot. All privately owned sanitary sewers (i.e. connections) shall drain to a manhole in the Council sanitary sewer system.
- ii. Alternatively, if authorised by Council, developers may have the option of providing sanitary sewer facilities to the individual titles or tenements in new developments by extending the Council sanitary sewer system into the lot and providing a separate connection to each unit. All sanitary sewer reticulation must be to the Code of Practice standards. Easements shall be created at Council discretion and standard.



Where the above developments are proposed a single 150mm diameter lateral will be required. Multi-unit developments will be required to upgrade existing laterals if less than 150mm diameter

6.3.6 General Considerations Connectsion

6.3.6.1 Requirements of Design

The design shall specify the requirements for the service connections including:

- i. Plan location and lot contours.
- ii. Invert level at property boundary or junction with the main as applicable.

6.3.6.2 Number of Connections

It is normal practice to provide one connection per lot. Provision of additional connections shall be subject to justification by the developer and approval by the Authorised Officer.

6.3.6.3 Location of Connection

- i. The connection shall be located to service the lowest practical building platform on the property and where possible:
 - a. be clear of obstructions, e.g. tree, tree roots, paved areas
 - b. be easily accessible for future maintenance
 - c. be clear of any known future developments, e.g. swimming pools or driveways

6.3.6.4 Connection Depth

Connection depths shall be set to drain the whole serviced area recognizing the following factors:

- i. Surface level at plumbing fixtures of buildings (existing or proposed)
- ii. Depth to invert of pipe at plumbing fixture or intermediate points
- iii. Minimum depth of cover over connection to be 600mm unless protected by hard surface
- iv. Invert of Council sanitary sewer system at junction point
- v. Allowance for crossing other services
- vi. Allowance for minimum gradients of laterals and private drainage
- vii. Connection junctions installed at minimum of 45 degrees (vertical) to main

Be no deeper than 1.5m without approval from the Authorised Officer.

The designed invert level at the connection shall be not higher than the lowest calculated level consistent with these factors.



Deep connections shall be brought up to within 1.5m of finished surface (Drainlayer can then cut connection down to required level if necessary)

6.3.6.5 Installation of Connections

- i. Connection of a private sewer drain to the public system can only be carried out by a Registered Drainlayer and after drainage consent has been approved by Council.
- ii. The end of each connection pipe shall be sealed with a solvent welded cap, painted red, in greenfield developments if connection does not to occur immediately.
- iii. Each connection point shall be marked with a 50 x 50mm timber stake which shall extend from the invert to a minimum of 300mm above finished ground level. A Red PVC marker tape labelled "sewer" shall be attached to the connection pipe, brought up and tied to the top of the stake.

6.4 Maintenance Structures

6.4.1 General

This section describes the requirements for structures which permit access to the Council sanitary sewer system for maintenance. These are categorized as:

- i. Manholes (MH)
- ii. Rodding eyes (RE)

The selection of a suitable location for maintenance structures may influence the pipe alignment. Generally, a minimum clearance of 1000mm should be provided around maintenance structures clear of the opening to facilitate maintenance and rescue. Council may determine other specific requirements subject to the individual site characteristics.

Maintenance structures shall be located:

- i. Where long term, safe access is available (if possible/practicable)
- ii. Clear of floodways, stormwater detention areas, stormwater secondary flow paths and intertidal regions

Location of Manholes

The design shall include manholes at the following locations:

- i. Intersection of pipes except for junctions between mains and laterals
- ii. Changes of pipe size



- iii. Changes of pipe direction, except where horizontal curves are used
- iv. Changes of pipe grade
- v. Changes of pipe invert level
- vi. Changes of pipe material, except for repair/maintenance locations
- vii. Permanent or temporary ends of a pipe
- viii. Discharge of a rising main into a gravity pipe

6.4.2 Manhole Spacing

For reticulation pipes, the maximum distance between manholes shall be 100m.

6.4.3 Deep Manholes

Where a manhole is more than 5.0 metres deep it shall have no steps installed and larger diameter chambers and covers will be required and engineering approval form Authorised Officer will be required.

Where a manhole is more than 5.0 metres deep it shall incorporate clear warning that the manhole is a deep manhole, with a secure entrance.

6.4.4 Size of manholes

The standard internal diameter of circular MHs is 1050mm and 1500mm diameter risers shall be used for all manholes deeper than 5m. When considering the appropriate MH diameter, consideration shall be given by the designer to the base layout to ensure hydraulic efficiency and adequate working space in the chamber. Where the effective working space is reduced by internal drop pipes or where there are several inlets, a larger diameter will be required.

6.4.5 Base Layout

- i. Benching definitions shall be provided in the base of each MH that provides a safe place to stand for maintenance purposes.
- ii. The benching will be close to flat with a cross fall (5H:1V) into the MH pipe system for drainage purposes.

6.4.6 Allowable Deflection Through MHs

A maximum allowable deflection through a MH shall comply with Table 6.8.



Table 6.8 Maximum allowable deflections through MHs

Pipe size	Maximum deflection
DN	Degrees (°)
150 to 300	Up to 120° for internal fall along MH channel
	Up to 150° when using an internal or external
150 to 300	drop structure

6.4.7 Internal Falls Through MHs

- a. Reticulation pipes:
 - i. The minimum additional internal fall through a reticulation channel in a MH shall comply with Table 6.9
 - ii. The maximum fall to the benching in a MH is to be 600mm.
 - iii. Where the outlet diameter at a MH is greater than the inlet diameter, the minimum fall through the MH shall be not less than the difference in diameter of two pipes, in which case the pipes shall be aligned soffit to soffit.
 - iv. On pipes where the maximum internal fall of 600mm will be exceeded across the base of the manhole then internal or external drops shall be provided.

Table 6.9Minimum internal fall through MH joining sewer main pipes
of same diameter

Deflection angle at MH	Minimum additional fall
Degrees (°)	(mm)
0 to 30	30
>30 to 60	50
>60 to120	80

- b. Connections to Manhole
 - i. The invert of a connection must connect to the MH at a level no lower than the average of the soffit levels of the main inlet and outlet pipes.
 - ii. Maximum angle of deflection of lateral/connection into the manhole main channel shall be 90 degrees.

6.4.8 Effect of Steep Grades on MHs

Where a pipe of grade >7 % drains to a MH, the following precautions shall be taken:

- i. No change of grade is permitted at inlet to a MH
- ii. Steep grades are to be continuous through the MH at the same grade
- iii. Depth of MH is to exceed 1.5m to invert for DN 150 and DN 225 pipes
- iv. Depth of MH is to exceed 2.0m deep for DN 300 pipes



- v. Change of direction at the MH is not to exceed 45 degrees
- vi. No drop junctions or verticals are to be incorporated in the MH
- vii. Inside radius of channel inside the MH is to be greater than 6 times the pipe diameter; and
- viii. Benching is to be taken 150mm above the top of the inlet pipe.
- ix. To avoid excessively deep channels within MHs, steep grades (>7 %) shall be "graded-out" at the design phase where practicable. The design of pipelines on gradients over 7% must be agreed with Authorised Officer.
- x. Benching of channels must ensure that the final platform is parallel with the main channel so that maintenance workers are able to stand comfortably on a flat surface. The benching shall be sloped towards the channel.

6.4.9 Flotation

In areas of high water table, all MHs shall be designed to provide a factor of safety against flotation of 1.25.

6.4.10 Access

MH steps shall comply with the requirements shown in the Drawings.

6.4.11 Covers

MH covers with a minimum clear opening of 600 mm in diameter, shall be used:

- i. "Non-rock" covers must be used on all State Highway (Primary Arterial) and Secondary Arterial roads. (roads with greater than 10,000 vehicles per day).
- ii. "Heavy Duty" covers must be used in the road reserve, carriageway, commercial and industrial properties and all public areas.
- iii. "Standard" covers may only be used on residential properties.
- iv. All covers must be painted with white road marking paint.

6.4.12 Areas Subject to Flooding

Watertight type bolt-down metal access covers:

- i. In systems where the possibility of surcharge exists; and
- ii. Along creeks subject to flooding above the level of the cover, in tidal areas, or in any location where surface waters could inundate the top of a MH.
- iii. The top of MHs in areas subject to flooding shall be a minimum of 300 mm above the 2% AEP flood level.

6.4.13 Rodding Eyes (RE)

i. uPVC bends up to 45 degrees are acceptable



- ii. A frame and cover shall be installed over the entry point where the RE is to be located in areas other than permanent hardstand areas
- iii. The cover type and details shall be as shown on the drawing
- iv. A fire hydrant base and RE cover may only be installed in permanent hardstand areas

6.5 Wastewater Pumping Stations

All wastewater pump stations will need prior approval from the Authorising Officer before detailed design is undertaken. Up to date electrical and telemetry specifications will be supplied by Council. All wastewater pump stations design will need to include consultation with the Council's maintenance contractor.

For the design of wastewater pump station see the standard technical specification section DS 11 Waste water pump stations.

Storage calculations will be checked and agreed at the time of approval of engineering plans. Rising mains shall be installed with "Sewer" marker tape laid continuously above the pipe.

6.6 Wastewater Treatment Plant Design

6.6.1 Plant Capacity

Where the specific flows from the catchment areas are known these shall be used as a basis for the treatment plant design.

When the above information is not available the design flows shown in section 6.1.2 shall be used. The plant shall be designed for a minimum life of 50 years. Electrical and mechanical components shall have a design life of at least 15 years and telemetry equipment 10 years.

The plant needs to be designed to cater for all flow rates throughout the design life of the plant. Staged construction/upgrades over the plant life should also be defined assuming Council agreed growth rates.

6.6.2 Treatment Process

The treatment process shall produce effluent that meets the Regional Council discharge quality requirements.

Disinfection is required for all wastewater treatment plants. UV disinfection is the preferred method to ensure a high level of treatment is achieved.

6.6.3 Effluent Discharge

Council will not take control of any treatment plant until all consent conditions are met for a minimum continuous period of 12 months.

6.6.4 Site Features

The plant is required to be fully security fenced, gated, landscaped and to be non obtrusive. The grounds shall be maintained by the developer in accordance with accepted Council grounds maintenance standards, during the maintenance/defects liability period.

6.6.5 Operations and Maintenance

Full and clear operation and maintenance manuals and site health and safety plans shall be prepared for the treatment plant. These shall be delivered to Council at the time of hand-over of the treatment plant.

The documentation shall include full asset data, including a component schedule complete with make, model, serial number, replacement date and valuation.

A clear contingency plan shall be prepared showing plans for safe disposal of all by-products as well as emergency procedures to be followed in the event of partial or complete plant failure

6.6.6 Monitoring

A monitoring plan shall be prepared as part of the deliverables. This plan shall include a clear programme for sampling, analysis and reporting as required in order to demonstrate compliance with the Resource Consent.

If groundwater quality monitoring is required by the Resource Consent, then the developer shall install the necessary monitoring piezometers. These shall comprise perforated pipes of at least 100mm diameter, fitted with lockable caps. The pipes shall be wrapped with filter cloth and surrounded by at least 100mm of drainage metal. Each piezometer shall be clearly and permanently labeled with a unique identification number.

6.6.7 Private Treatment Plants

Privately developed treatment plants within Western Bay of Plenty District may be vested in Council subject to meeting WBOPDC compliance requirements. Council will only accept ownership of these plants if they are designed and built in accordance with this Code.

Successful commissioning of the plant must be demonstrated and the plant is to be operated by the developer for a continuous period of at least 12 months prior to hand over to Council. 100%



compliance with the discharge consent conditions is required for a continuous 12 month period prior to acceptance by Council.



Appendix I Rules for Building in Close Proximity to Public Services

Western Bay of Plenty District Council

Rules for Building in Close Proximity to Public Sewers (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
 - 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 1.5m 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.





Wastewater Drainage Bylaw 2008

This Bylaw regulates the use of the Western Bay of Plenty District's wastewater drainage system and is intended to protect the system from damage and misuse, and to promote and protect public health.

This Bylaw, which is made under the authority of the Local Government Act 2002 and section 23 and section 64 of the Health Act 1956, is based on the Standards NZ model document NZS 9201: Chapter 22 (Int); 1999.

Attention is drawn to the Western Bay of Plenty District Council Terms and Conditions for the Acceptance of Wastewater Drainage which should be read in conjunction with this Bylaw, but do not form part of this Bylaw.



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Western Bay of Plenty District Council

Wastewater Drainage Bylaw 2008

Authority

Pursuant to the powers vested in it under sections 145 and 146 of the Local Government Act 2002, and sections 23 and 64 of the Health Act 1956, the Western Bay of Plenty District Council makes this Bylaw.

Title

This Bylaw is the Western Bay of Plenty District Council Wastewater Drainage Bylaw 2008. This bylaw comes into force on 1 July 2008.

Repeal

The Western Bay of Plenty District Council Waste Water Drainage Bylaw 2001 is repealed.

Scope

This Bylaw regulates the use of the Western Bay of Plenty District Council's wastewater drainage system. It is intended to promote and protect public health, and to protect the wastewater drainage system from damage and misuse. In general only matters which are not covered by legislation or regulations are included in the Bylaw.

This Bylaw is based on the Standards NZ model document NZS 9201: Chapter 22 (Int): 1999.

Attention is drawn to the Western Bay of Plenty District Council's Terms and Conditions for the Acceptance of Wastewater Drainage which should be read in conjunction with this Bylaw, but do not form part of this Bylaw.

Savings

All approvals, permits, and other acts of authority (including any resolutions of the Council) which originated under the Western Bay of Plenty District Council Waste Water Drainage Bylaw 2001, and all applications, and other acts of parties and generally all documents, matters, acts, and things which so originated and are continuing at the commencement of this Bylaw, continue for the purposes of this Bylaw to have full force and effect.

The revocation of the Western Bay of Plenty District Council Waste Water Drainage Bylaw 2001 does not prevent any legal proceedings, criminal or civil, being taken to enforce that Bylaw and such proceedings continue to be dealt with and completed as if the Bylaw had not been revoked.



Application of General Bylaw, Chapter 1

The provisions of the Western Bay of Plenty District Council General Bylaw 2008, Chapter 1 Introduction and any bylaw passed in amendment or substitution of that Chapter are implied into and form part of this Bylaw.



Definitions

The definitions in the Western Bay of Plenty District Council General Bylaw 2008, Chapter 1 Introduction apply to this Bylaw unless otherwise provided in the Bylaw. For the purposes of this Bylaw, and unless inconsistent with the context, the following definitions apply:

Acceptable Discharge	means a wastewater with physical and chemical characteristics which comply with the Council's requirements for discharge into the wastewater drainage system.	
Building Work	has the same meaning as that set out in section 7 of the Building Act 2004.	
Buried Services	means all public sewers, rising mains, trunk sewers and other underground utilities under the responsibility of the Council.	
Bylaw	means the Western Bay of Plenty District Council Wastewater Drainage Bylaw	
Characteristic	means any of the physical or chemical characteristics of wastewater or trade waste.	
Customer	means a person who either discharges, or has obtained consent to discharge or direct the manner of discharge of wastewater from any premises to the public sewer of the Council.	
Customer Service Agreement	means the document signed by the customer as accepting the Terms and Conditions for the Acceptance of Wastewater Drainage.	
Deed of Covenant	means a signed and sealed agreement written into a certificate of title or other instrument where parties agree to do or refrain from doing certain acts	
Disconnection	means the physical cutting and sealing of the drain from a premises.	
Domestic Sewage	means liquid wastes (including matters in solution or suspension therein)	
(or Domestic Wastewater)	discharged from premises used solely for residential purposes, or wastes of the same character discharged from other premises; but does not include any solids, liquids, or gases that may not lawfully be discharged into sewerage drains controlled by a local authority.	

Drain	means that section of private drain between the customer's premises and the point of discharge into a public sewer through which wastewater is conveyed from the premises. (This section of drain is owned and maintained by the customer or with the Council's express approval a group of customers).
Gully Trap	means a fitting designed to prevent foul air escaping from the drainage system and used to receive the discharge from waste pipes.
Infiltration	means water entering a public sewer or private drain from groundwater through defects such as poor joints, and cracks in pipes or manholes. It does not include inflow.
Inflow	means water discharged into a private drain from non-complying connections or other drainlaying faults. It includes stormwater entering through illegal downpipe connections or from low gully traps.
Level of Service	means the measurable performance standards on which the wastewater authority undertakes to receive wastewater from its customers.
Memorandum of Encumbrance	means an agreement for the payment by any person or persons by yearly or periodical payments or otherwise of any annuity, rent charge, or sum of money other than a debt where land owned by the person or persons is legally defined and used as security should failure to pay occur.
Person	includes an individual person, or group of individual persons bound together by a common purpose, and includes a body corporate or body sole.
Point of Discharge	means the boundary between the public sewer and a private drain.
Premises	includes –
	 (a) a property or allotment which is held under a separate certificate of title or for which a separate certificate of title may be issued and in respect to which a building consent has been or may be issued, or
	(b) any building or any part thereof used or intended to be used exclusively or principally as the residence of one household.
	(c) land held in public ownership (e.g. reserve) for a particular purpose.
Prohibited Characteristics	means a wastewater discharge containing the physical and chemical characteristics which Council has determined must not be discharged into the public sewer system.

Rising Main	means a sewer through which wastewater is pumped.
Service Opening	means a manhole, or similar means for gaining access for inspection, cleaning or maintenance, of a public sewer
Sewer (or public sewer)	means the public sewer and includes all its parts including buried services and extending from the point of discharge to any treatment plant or other point of disposal and which is owned, administered and maintained by the Council.
Stormwater	means all surface water run-off resulting from precipitation.
Trade Premises	has the meaning assigned to that term in the Trade Wastes Bylaw 2008.
Trade Waste	has the meaning assigned to that term in the Trade Wastes Bylaw 2008.
Trade Waste Bylaw	means the Western Bay of Plenty District Council Trade Wastes Bylaw 2008.
Trunk Sewer	means a sewer, generally 150mm or greater in diameter, which forms a part of the principal drainage network of the Council's wastewater drainage system.
Wastewater	means water or other liquid, including waste matter in solution or suspension, discharged from a premises to a sewer.
Wastewater Drainage System	means all parts of the public sewer system located within the Western Bay of Plenty District which is owned, administered and maintained by the Council, and includes buried services extending from the point of discharge to any treatment plant or other point of wastewater disposal.

Making of this Bylaw

The initial resolution to make this bylaw was passed by the Western Bay of Plenty District Council at a meeting of the Council held on 1 May 2008 and was confirmed following consideration of submissions received during the special consultative procedure, by a resolution of the Council at a subsequent meeting of the Council held on 26 June 2008.

The Common Seal of the Western Bay of Plenty District Council was affixed pursuant to a resolution of the Council on 26 June 2008 in the presence of:

General Manager

Seal

Date



Western Bay of Plenty District Council

Wastewater Drainage Bylaw 2008

1. Introduction and Objective

- 1.1 This Bylaw covers matters relating to the Western Bay of Plenty District Council wastewater drainage system. The purpose of this Bylaw is to regulate the use of, and protect Council's wastewater drainage system from damage and misuse, and to promote and protect public health.
- 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. Council Operating Procedures

- 2.1 The Council may from time to time, by ordinary resolution
 - (a) Adopt system operating procedures to protect the wastewater drainage system from damage and misuse including the setting of the nature and levels of characteristics of any wastewater to be discharged into the Council's sewerage system;
 - (b) Set the terms and conditions upon which wastewater discharged from any premises will be accepted into the Council's wastewater drainage system.
 - (c) Pursuant to the provisions of section 12 and section 150 of the Local Government Act 2002, prescribe fees and charges payable for anything to be done, made or given by the Council, or its contractors or agents, arising out of or in connection with this Bylaw.
- 2.2 Any customer who discharges wastewater into Council's wastewater drainage system must sign a *Customer Service Agreement* and at all times comply with the Council's operative Terms and Conditions for the Acceptance of Wastewater Drainage as from time to time fixed by resolution of Council.
- 2.3 Council may, from time to time by way of an ordinary resolution, amend, extend, rescind, or vary any resolution made in accordance with the provisions of clause 2.1.



3. Acceptance of Discharge

3.1 Approval to Connect

3.1.1 No person, other than the authorised agents of the Council may, without written approval of Council, make any connection to or otherwise interfere with any part of the wastewater drainage system including buried services.

3.2 Acceptable Discharge Characteristics

The nature and levels of the characteristics of any wastewater discharged into the Council wastewater drainage system must comply at all times with the characteristics adopted by Council by resolution publicly notified from time to time, provided however, that those characteristics may be varied by the Council as part of an approval given to a customer or customers to discharge a wastewater which does not meet the normal characteristics.

3.3 Domestic Wastewater

Every dwelling/house is entitled to have its wastewater accepted by the Council subject to -

- (a) the premises lying within an "urban drainage area" if such an area has been designated by the Council under the Local Government Act 2002; or
- (b) the premises being within an area which is served by public sewers; and
- (c) payment of all rates, charges and levies in respect to that property; and
- (d) compliance with the Terms and Conditions relating to the acceptance of wastewater discharge from those premises.

4. Premises

4.1 Flow Rate

- 4.1.1 No person may discharge wastewater into the sewer at an instantaneous flow rate exceeding the rate determined by the Council from time to time, or in excess of the rate stipulated in the Council's Terms and Conditions for the Acceptance of Wastewater Drainage in respect of those premises.
- 4.1.2 The Council may set a maximum daily flow rate which can be discharged from any premises into the wastewater drainage system.



4.2 **Prohibited Characteristics**

No person may discharge into the Council *sewer* any *wastewater* with the *characteristics* which Council has resolved to prohibit from discharge into the wastewater drainage system.

4.3 **Prevention of Inflow and Infiltration**

The *customer* must prevent any *stormwater* or groundwater (including water from roof downpipes, surface water run-off, overland flow, and sub-surface drainage) from entering the Council sewer.

5. Hazardous Materials

5.1 Not to Enter Sewer

No person may discharge into any public sewer any material, product or waste containing corrosive, toxic, biocidal, radioactive, flammable or explosive matter or any other material, product or waste which when mixed with the wastewater in the *sewer* is likely to generate toxic, flammable, explosive or corrosive materials in quantities that may be detrimental to the Council's wastewater system or present a hazard to Council's staff or members of the public.

Every person who becomes aware that any hazardous material, product, or waste, has entered the wastewater drainage system must immediately notify Council of the details. This requirement is in addition to any other obligation that person has to notify other authorities of release of a hazardous substance.

6. Breaches and Remedies

6.1 Defect Notices

In the event of any default or breach by a *customer* in respect of the *customer's* obligations relating to the *sewer*, whether under this Bylaw or any act or regulation, the Council may, without prejudice to any other recourse or remedy that may be available, and having regard to public health and safety and the risk of damage to the *sewer*, in its absolute discretion may –

- (a) undertake any remedial work required in order to make good the breach or default and recover from the *customer* all costs including solicitor and client costs incurred in connection with the remedial work; or
- (b) give notice to the *customer* to rectify the default or breach and that notice may include a period within which the default or breach is to be remedied.



6.2 Remedial Work

If the default or breach is not remedied in a reasonable time, or within the time specified in the notice given under the foregoing clause, the Council may –

- (a) disconnect the customer's premises from the sewer;
- (b) carry out any remedial works required;
- (c) recover all costs incurred including solicitor and client costs;
- (d) charge a re-inspection fee;
- (e) undertake any one or more of them as the Council sees fit.

7. Penalties and Remedies

Any person contravening, or committing or permitting or allowing a breach of any of the provisions of this Bylaw, commits an offence against this Bylaw.

Without prejudice to any of the provisions of this Bylaw, Council may pursue any legal remedies available to it pursuant to the provisions of the Local Government Act 2002, or any other Act or regulation applicable to the discharge of wastewater drainage.

In addition to any legal penalties arising from any breach, offence, or dispute Council may seek to recover all costs arising from and associated with any such breach, offence or dispute.