Resource Consent Application Form 6A

Application to discharge wastewater to land - less than 14,000 litres per day

Otago Regional Council

IMPORTANT NOTES TO APPLICANT

You must complete this form **and** Resource Consent Application Form 1 in full.

This form is to be used for wastewater discharges to land with a maximum volume less than 14,000 litres per day, such as discharges from residential dwellings and/or from small scale commercial operations (motels, campgrounds, cafes, public toilets etc.).

It is strongly recommended that you engage a qualified engineer or technical specialist experienced in wastewater treatment and disposal to inspect any existing treatment and disposal system(s) and/or design any new system(s), and to assist with the preparation of this consent application.

Your application will be assessed in accordance with the Australian/New Zealand Standard 1547:2012 "On-site Domestic Wastewater Management" 2012. Your application will also be assessed in terms of potential adverse effects on groundwater, surface water, soil health, site stability, flooding effects and public health. Consideration should be given to these potential effects in the design of the wastewater treatment and disposal system.

It is crucial that you provide as much relevant information as possible with your application and in an understandable way. This will help ORC staff process it efficiently, and at the minimum cost.

If all the necessary information is not entered on the form or supplied with the application then Otago Regional Council may return your application, request further information or publicly notify your application. This will lead to delays in the processing of your application and may increase processing costs.

This application form, when properly completed, should provide an adequate "Assessment of Effects on the Environment" (AEE) where the adverse effects of a proposal are not significant. However, this can only be determined on application.

Part A: General

A.1 Is this application (*tick which applies*):

☐ For a NEW wastewater discharge *(go to question A.4)*

OR

☐ To REPLACE a current Discharge Permit? Consent number:_____

A.2 Was the treatment and disposal system installed before 28 February 1998?

☐ Yes ☐ No

A.3 Has the treatment OR disposal system been modified in any way since 28 February 1998 or is intended to be modified as part of this application?

☐ Yes ☐ No

A.4 Please specify why a discharge permit is being applied for:

- ☐ Daily discharge volume exceeds 2,000 litres per day (calculated as a weekly average)
- ☐ Discharge will occur within 50m of an existing bore/well used to supply water for domestic needs or drinking water for livestock
- ☐ Discharge will occur within 50 metres of the coastal mean high water springs
- ☐ Discharge may run off to another person's property
- ☐ Discharge will occur in the A zone of any groundwater protection zone, or in the Lake Hayes catchment
- ☐ Discharge will occur within 50m of a surface water body
- ☐ There will be a direct discharge into a drain, water race or groundwater

Is resource consent required under the National Environmental Standards: Freshwater[1]

- ☐ Yes, my discharge will occur within 100 metres of a natural wetland[2]
- ☐ No, there are no natural wetlands in close proximity to the discharge site.

A.5 Please provide the contact details of the qualified engineer or technical specialist who assisted with the preparation of this consent application, and/or please provide a technical design report.

☐ Suitably qualified and experienced person:

Name and qualifications/expertise_____

AND/OR

☐ Attach a separate technical design report for wastewater treatment and disposal system

Part B: Location of Discharge

B.1 Details of the property on which the wastewater will be discharged (if different from applicant's details on Form 1):

Full name(s) of owner(s)_____

Physical Address

_____

Phone number _____

Email address _____

B.2 Please provide an accurate GPS location in NZTM2000 (New Zealand Transverse Mercator) format for the mid-point of the discharge area.

Note: this should be two seven digit numbers e.g. E1415593 N4923363 and can be obtained using a handheld GPS, from topomap.co.nz (using the coordinates function) or from https://maps.orc.govt.nz/OtagoMaps/. If you have more than one disposal site please add in the mid points for all sites.

[1] https://www.legislation.govt.nz/regulation/public/2020/0174/latest/LMS364099.html

[2] natural wetland means a wetland (as defined in the Act) that is not:
(a) a wetland constructed by artificial means (unless it was constructed to offset impacts on, or restore, an existing or former natural wetland); or
(b) a geothermal wetland; or
(c) any area of improved pasture that, at the commencement date, is dominated by (that is more than 50% of) exotic pasture species and is subject to temporary rain-derived water pooling.

Map Reference of mid-point of Discharge Area: NZTM 2000 E _____ N _____

Map Reference of mid-point of Discharge Area: NZTM 2000 E _____ N _____

Map Reference of mid-point of Discharge Area: NZTM 2000 E _____ N _____

If the discharge area is greater than 50 m^2 please provide map references for the boundaries of the discharge area:

NE Corner: NZTM 2000 E _____ N _____

SE Corner: NZTM 2000 E _____ N _____

SW Corner: NZTM 2000 E _____ N _____

NW Corner: NZTM 2000 E _____ N _____

B3. Legal Description of the site. Please also attach a Certificate of Title less than 3 months old.

B4. Please provide a plan (this can be hand-drawn if necessary) illustrating the location of the discharge which clearly identifies:

- ☐ The location of the dwelling/building(s) to which the discharge relates.
- ☐ The location of the treatment system and the complete extent (including dimensions) of the discharge area(s).
- ☐ The location of any reserve disposal area(s) (including dimensions).
- ☐ The location of stormwater cut-off drains, stormwater discharges (e.g. soak holes) and any overland flow paths.
- ☐ The location of any waterbodies (including streams, drains and water races).
- ☐ The location of other dwellings or buildings, other wastewater treatment and disposal systems, archaeological, waahi tapu[3], cultural or heritage features.
- ☐ The location of any bores within a radius of 100m from the edge of the discharge area.
- ☐ The location of soil assessment bore holes or test pits that relate to this application.
- ☐ Flood levels for up to a 1 in 100-year event (if applicable)
- ☐ The location of any natural wetlands (if applicable)

The plan is also required to include a scale bar, a north arrow, an arrow indicating the direction of groundwater flow, contours of the land, property boundaries and road names.

B.5 Fill out the table below detailing separation distances for the treatment and disposal systems:

Separation distance from nearest	Distance from treatment system (m)	Distance from disposal field (m)
Property boundaries		
Habitable buildings		
Embankments / retaining walls		
Wells / bores		

[3] **Waahi Tapu:** Sacred places; sites, areas and values associated with water bodies that hold spiritual values of importance to Kai Tahu.

Rivers, streams, drains and/or water races		
Soak holes, dispersion trenches etc.		
Other (specify)		

Part C: Site Information and Assessment

C.1 Please specify if the disposal area is located on a slope:

☐ The site is flat

OR

The slope angle is approximately _____degrees

C.2 Please specify if the site is within a floodplain:

☐ The site is not in a floodplain

OR

☐ The site is in a floodplain and the flood levels for up to a 1 in 100-year event are illustrated on the plan required by B.4 above and a flood assessment report is attached

C.3 Is the treatment and disposal site subject to land instability?

☐ No

OR

☐ Yes, a geotechnical assessment prepared by a geotechnical engineer is attached

C4. If boreholes or test pits are required for subsoil investigation, please draw their location on the plan required in B.4 and provide the detail below:

(Please note a minimum of 3 boreholes or test pits are required for subsoil investigation).

☐ Test pit Maximum depth_____m No. of test pits_____

☐ Borehole Maximum depth_____m No. of boreholes_____

☐ Other (please specify)_____

C.5 Please attach the subsoil investigation report and/or percolation or soil infiltration testing:

A subsoil investigation report is required for all new applications. For an application for the continuation of an existing treatment and disposal system, please attach the original reports that were submitted when you applied for the original consent. If you are unsure whether percolation or subsoil testing is required, or if you do not have any of the original reports, please seek advice from a qualified engineer or technical specialist.

☐ Subsoil investigation report attached

☐ Percolation or soil infiltration test report in accordance with Appendix G of AS/NZS 1547:2012 attached

C.6 Based on the above reports, please specify the disposal field soil category (in accordance with ANZS1547:2012):

Soil Category	Description	Depth below ground level (m)
1	Gravels and sands	
2	Sandy loams	
3	Loams	
4	Clay loams	

5	Light clays	
6	Medium to heavy clays	

Part D: Discharge, Treatment and Disposal Details

D.1 Please specify the water supply source for the site:

☐ Public supply ☐ Private bore/well ☐ Roof collected rainwater

☐ Other (please specify) _____

D.2 Please specify the wastewater source:

☐ Single residential dwelling ☐ Multiple dwellings (please specify)_____

☐ Other (please specify)_____

D.3 Please calculate the Typical Wastewater Flow Allowance in Litres/Person/Day. (Refer to Table H3 and H4 of ANZS1547:2012 for more information).

Source	Number	Maximum Occupancy	On-site Roof Water Tank Supply	Reticulated Community or Bore Water Supply	Total Volume
Households with standard facilities			180	200	
Households with standard water reduction facilities			145	165	
Households with full water reduction facilities			120	145	
Households (black water only)			60	60	
Households (grey water only)			90	120	
Motels/Hotels					
• Guests/resident staff			220	220	
• Non-resident staff			30	30	
• Reception rooms			20-30	20-30	
• Bar trade (per customer)			20	20	
• Restaurants (per diner)			25-30	25-30	
Community Halls					
• Banqueting			20	30	
• Meetings			10	15	
Tea Rooms/Lunch bars (per customer)					
• Without restroom facilities			10	15	
• With restroom facilities			15	25	
Schools (pupils plus staff)			15 -30	15-30	
Rural factories, shopping centres			30	50	
Camping grounds					
• Fully serviced			100	130	
• Recreation areas			50	65	
Total					

In accordance with Table J1 of ANZS1547:2012, please allow for the following number of people per household:

Number of bedrooms	Population equivalent (persons)
1 - 3	1 - 5
4	6 - 7
5	8
6	9 - 10

D.4 Please provide the following discharge details:

Maximum volume discharged per day: _____litres per day

Average volume discharge per day: _____litres per day

Is the discharge: ☐ Intermittent ☐ Permanent

Are seasonal fluctuations likely? ☐ Yes (explain below) ☐ No

D.5 Specify whether you propose to install:

☐ A water conservation device ☐ Water recycling

Please provide details of the estimated reduction of water usage and water saving fixtures in place or proposed. If you are not intending to install conservation or recycling devices, please explain why.

D.6 Please attach a description of the treatment and disposal system in accordance with the requirements of Appendix A Description of Treatment and Disposal Specifications, along with relevant manuals and/or specification documents and a copy of the latest maintenance/ service records. NOTE: For replacement applications, if you cannot provide this then you will need to engage a qualified engineer or technical specialist to inspect your system, advise what it consists of, and assess how well it is performing.

D.7 Please state the expected effluent quality of the treated wastewater. For new systems, refer to the manufacturer's specifications. For existing systems, you may need to engage a qualified engineer or technical specialist to advise.

Contaminant	Concentration
Biochemical oxygen demand (BOD_5) (mg/L)	
Total suspended solids (mg/L)	
Total nitrogen (mg/L)	
Escherichia coli (*E. Coli) (cfu/100ml)*	

Part E: Assessment of Environmental Effects

E.1 An Assessment of Environmental Effects is required in accordance with Section 88 and Schedule 4 of the Resource Management Act 1991. Please confirm:

☐ An Assessment of Environmental Effects which meets the requirements of Schedule 4 of the Resource Management Act 1991 and the requirements of Appendix B Assessment of Discharge Effects is attached to this form.

Part F: Statutory Assessment

The Resource Management Act requires this application to include an assessment of the proposed activity against the relevant statutory documents. In this case, the Regional Plan: Water and Iwi Management Plans are the most relevant documents. For larger applications, assessment against higher order documents may also be required.

If you are unable to answer the questions below, or you believe your proposal is inconsistent with the relevant policies and documents discussed, it is recommended you seek professional planning assistance to help you with your application.

F.1 Please indicate (tick) which of the following policies from the Regional Plan: Water for Otago (RPW) your proposal is consistent with:

☐ Policy 7.B.1 Manage the quality of water in Otago's fresh water by recognising the differences in the effects and management of point and non-point source discharges; describing in Schedule 15 characteristics indicative of good water quality, setting receiving water numerical limits and targets; maintaining good quality water, enhancing water quality where it does not meet Schedule 15 limits, recognising discharge effects on groundwater and promoting the discharge of contaminants to land in preference to water.

☐ Policy 7.B.2 Avoid objectionable discharges of water or contaminants to maintain the natural and human use values, including Kāi Tahu values, of Otago's fresh water.

☐ Policy 7.B.4 Have regard to:
a) the ability of the land to assimilate the water or contaminants; and
b) any potential for soil contamination; and
c) any potential for land instability; and
d) any potential adverse effects on water quality; and
e) any potential adverse effects on use of any proximate coastal marine area for contact recreation and seafood gathering.

☐ Policy 7.B.8 Encourage adaptive management and innovation that reduce the level of contaminants in discharges.

☐ Policy 7.C.1 Have regard to opportunities to enhance the existing water quality of the receiving water body where it is degraded

☐ Policy 7.C.2 Have regard to:
a) The nature of the discharge and the sensitivity of the receiving environment to adverse effects;
b) The financial implications, and the effects on the environment of the proposed method of discharge when compared with alternative means; and
c) The current state of technical knowledge and the likelihood that the proposed method of discharge can be successfully applied.

☐ Policy 7.C.3 Have regard to any relevant standards and guidelines in imposing conditions on the discharge consent.

☐ Policy 9.4.1 Ensuring that the suitability of aquifers to support recognised uses of groundwater identified in Schedule 3 is maintained when discharging contaminants.

☐ Policy 9.4.18(c) Managing the vulnerability of groundwater to leachate contamination by identifying high risk areas.

F.2 The Environmental Protection Agency notified Plan Change 8 to the Regional Plan: Water for Otago (RPW) on 6 July 2020. Please indicate (tick) whether your proposal is consistent with the following policy:

☐ Policy 7.C.12 Reduce the adverse effects of discharges of human sewage from reticulated wastewater systems by:

a) Requiring reticulated wastewater systems to be designed, operated, maintained and monitored in accordance with recognised industry standards; and
b) Requiring the implementation of measures to:
   (i) Progressively reduce the frequency and volume of wet weather overflows; and
   (ii) Minimise the likelihood of dry weather overflows occurring; and
c) Preferring discharges to land over discharges to water, unless adverse effects associated with a discharge to land are greater than a discharge to water; and
d) Having particular regard to any adverse effects on cultural values.

F.3 The National Policy Statement for Freshwater Management requires consideration.

The NPS-FM 2020, amongst other things sets out a framework of objectives and policies to manage activities affecting freshwater in a way that prioritises first, the health and well-being of water bodies and freshwater ecosystems, second, the health needs of people, and third, the ability of people and communities to provide for their social, economic, and cultural well-being, now and in the future. Part 2 of the NPS-FM sets out the national objective for future freshwater management and 15 separate policies that support this objective. The objective and policies in the NPS-FM are relevant when considering a wastewater discharge permit application which may adversely affect freshwater.

Please read the National Policy Statement for Freshwater Management 2020 | Ministry for the Environment

Is your application consistent with the NPS-FM 2020

☐ Yes

☐ No.

If No explain why

F.4 Please indicate (tick) which of the following policies from the Partially Operative Regional Policy Statement and Proposed Regional Policy Statement your proposal is consistent with:

☐ Policy 3.1.1 Manage discharges that are objectionable or offensive to Kāi Tahu and/or the wider community.

☐ IM-P13 Manage cumulative effects of activities and physical resources

☐ LF-WAI-O1 The mauri of Otago's water bodies and their health and well-being is protected, and restored where it is degraded, and the management of land and water recongnises and reflects that:

- water is the foundation and source of all life,
- there is an integral kinship between water and Kai Tahu whanui,
- each waterbody has a unique whakapapa and characteristics,
- water and land have a connectedness that supports and perpetuates life; and
- Kāi Tahu exercise rakatirataka, manaakitaka and their *kaitiakitaka* duty of care and attention over wai and all the life it supports.

Please read the proposed Regional Policy Statement and confirm what FMU the discharge is located in and confirm that the proposal supports the vision for this FMU - https://www.orc.govt.nz/plans-policies-reports/regional-plans-and-policies/otago-regional-policy-statements/proposed-otago-regional-policy-statement-2021

☐ LF-VM-O2 – Clutha Mata-Au

- In the Upper Lakes Rohe, the high quality waters of the lakes and their tributaries are protected, recognising the significance of the purity of these waters to Kai Tahu and the wider community;

- In the Dunstan, Manuherekia and Roxburgh Rohe, innovative and sustainable land and water management practices support food production in the area and reduce discharges of nutrients and other contaminants to water bodies so that they are safe for human contact.
- In the Lower Clutha Rohe, land management practices reduce discharges of nutrients and other contaminants to water bodies so that they are sage for human contact and there are no direct discharges of wastewater to waterbodies.

☐ LF-VM-O3 – North Otago

By 2050 in the North Otago FMU

- Healthy riparian margins, wetlands, estuaries and lagoons support thriving mahika kai, indigenous habitats and downstream coastal ecosystems
- Land management practices reduce discharges of nutrients and other contaminants to water bodies so that they are safe for human contact.

☐ LF-VM-O4 – Taieri

By 2050 in the Taieri FMU

- There are no direct discharges of wastewater to waterbodies

☐ LF-VM-O5 – Dunedin & Coast FMU

- Discharges of contaminants from urban environments are reduced so that water bodies are safe for human contact.

☐ LF-VM-O6 – Catlins

By 2030 in the Catlins

- Waterbodies support thriving mahika catchment and access to Kai Tahu whanui to mahika kai and access of Kai Tahu whanui to mahika kai,
- Healthy, clear and clean water supports opportunities for recreation and sustainable food production for future generations.

Please note for more complex applications further assessment and consideration of policies may be required.

F.5 The following policies from the Kai Tahu ki Otago Natural Resource Management Plan 2005 (NRMP) may be relevant to your application:

☐ To require land disposal for human effluent and other contaminants.

☐ To require monitoring of all discharges and that this be undertaken on a regular basis and all information, including an independent analysis of monitoring results, be made available to Kai Tahu ki Otago.

☐ To require that all discharge systems are well maintained and regularly serviced. Copies of all service and maintenance records should be available to Kai Tahu ki Otago upon request.

☐ To require visible signage informing people of the discharge area. Such signs are to be written in Māori as well as English.

☐ To require groundwater monitoring for all discharges to land.

F.6 For activities located south of the Clutha River/ Mata-Au the following policies from the Ngāi Tahu ki Murihiku Natural Resource and Environmental Iwi Management Plan 2008 - The Cry of the People, Te Tangi a Tauira may be relevant to your application:

☐ To require sufficient and appropriate information is provided to allow tangata whenua to assess cultural effects (e.g. nature of the discharge, treatment provisions, assessment of alternatives, actual and potential effects).

☐ To assess proposed wastewater discharge activities in terms of type/ nature of the discharge, location and sensitivity of the receiving environment, cultural associated with the location of operations, actual and potential effects on cultural values, available best practice technology, mitigation that can occur, community acceptability and cost.

☐ To avoid the use of water as a receiving environment for the direct, or point source, discharge of contaminants. Even if the discharge is treated and therefore considered "clean", it may still be culturally unacceptable. Generally, all discharge must first be to land.

☐ To assess waste disposal proposals on a case by case basis, with a focus on local circumstances and finding local solutions.

☐ To encourage creative, innovative and sustainable approaches to wastewater disposal that make use of the best technology available, and that adopt principles of waste reduction and cleaner production (e.g. recycling grey water for use on gardens, collecting stormwater for a pond that can then be used for recreation in a new subdivision).

☐ To require that the highest environmental standards are applied to consent applications involving the discharge of contaminants to land or water (e.g. standards of treatment of sewage).

☐ To require soil risk assessments (type and percolation of the soils) prior to consent for discharge to land, to assess the suitability and capability of the receiving environment. Wastewater loading rates (mm/day) must reflect effluent quality and soil properties.

☐ To require the use of buffer zones, bunds and other mechanisms to prevent wastewater from entering waterways.

☐ Any discharge activity must include a robust monitoring program that includes regular monitoring of the discharge and the potential effects on the receiving environment. Monitoring can confirm system performance and identify and remedy any system failures.

☐ Recommend a duration not exceeding 25 years, for discharge consents relating to wastewater disposal, with an assumption that upon expiry (if not before), the quality of the system will be improved as technological improvements become available. In some instances, a lesser term may be appropriate, with a condition requiring the system is upgraded within a specified time period.

F.7 If your proposal is not consistent with any of the policies above, please explain why:

Note: For larger applications, you may also need to provide a policy assessment which includes an assessment of the proposed activity against:

- The matters set out in Part 2 of the Resource Management Act 1991; and
    - any other relevant national environmental standards or national policy statements.

Part G: Consultation

G.1 Please describe any consultation undertaken with persons or parties potentially affected by the proposed discharge and append any written approvals that have been obtained. This should include parties or persons who may be potentially affected by your proposal. Please attach any written approvals received to the application. Please note that the Council only accepts unconditional written approvals and any conditions proposed by affected parties need to be agreed to and incorporated into the application. Refer to Form 1 for guidance on obtaining written approvals, and for the written approval form.

Part H: Checklist

- ☐ Fully completed this application form and Form 1?
- ☐ Attached a detailed site plan?
- ☐ Attached a technical design report?
- ☐ Attached a copy of the soil report and sub-soil testing?
- ☐ Attached a flood assessment report (if relevant)?
- ☐ Attached a copy of a site stability report (if relevant)?
- ☐ Attached specifications and/or manuals for the treatment and disposal system or attached a description in accordance with Appendix A?
- ☐ Attached any written approvals?
- ☐ Attached a Certificate of Title that is less than 3 months old?
- ☐ Attached an assessment of environmental effects in accordance with Appendix B?

To keep consent processing costs to a minimum it is strongly recommended that the checklist is complete, and all items required are attached before you lodge your application to the Council.

Appendix A: Treatment and Disposal Specifications

NOTE: For replacement applications, if you cannot provide everything requested below then you will need to engage a qualified engineer or technical specialist to inspect your system, advise what it comprises of, and assess how well it is performing.

A full description of the treatment and disposal system is required to be attached to this form and must provide the following:

- ☐ Description of the wastewater to be discharged and whether it is typical domestic human wastewater only or whether the contaminants loads are likely to be different (e.g. public toilets are likely to have a higher nitrogen concentration).
- ☐ For primary treatment, the number and capacity (litres) of all septic tanks/pre-treatment tanks, including type (e.g. single/dual/grease traps), to be installed or currently existing.
- ☐ A description of biosolid filters proposed to be installed on the septic tank/pre-treatment tank outlet(s), if proposed.
- ☐ A description of secondary treatment in place or to be installed (e.g. home/commercial aeration plant or packed bed reactor plant, activated sludge, oxidation/settling ponds, intermediate sand filter, re-circulating sand filter, membrane bioreactor, clarification tank/ponds etc.).
- ☐ A description of any tertiary treatment in place or to be installed (e.g. ultraviolet disinfection, chlorination, constructed wetlands etc.).
- ☐ A description of other components to be installed (e.g. 24-hour emergency peak flow storage, alarms –visual and/or audible alarm, remote telemetry unit, datalogger, wastewater meter, disc filter etc.) and/or other measures to combat cold temperatures and/or odour effects.
- ☐ A description of the discharge method (e.g. surface dripper irrigation, sub-surface dripper irrigation, conventional soakage trench, spray irrigation, mound, evapo-transpiration bed etc.).
- ☐ A description of the loading method (e.g. gravity, dosing siphon, pump/timer dose load, loading demand dose) and the brand/model.
- ☐ For disposal fields:
    - A description of the current and future land use, including vegetation
    - The total area of the disposal field in square meters
    - Whether the treated wastewater be discharged over the whole disposal field daily and why/why not
    - The maximum and average daily loading rates. This is calculated by dividing the average/maximum daily loading rate (L/day) by the area of the disposal field (m^2). This gives the loading rate in $L/m^2/day$, which is equivalent to mm/day.
    - The available reserve disposal area in square meters
    - If disposal fields are to consist of multiple zones, discuss how even loading is to be achieved
    - Is there the potential for any short circuit pathways and how will this be addressed?
    - Provide a description of any sub-surface cut-off drains/bunds, and if not proposed explain why not
    - Confirm whether the disposal area is on earth-worked or compacted land (as this may mean different design requirements and/or soil properties.
- ☐ A diagram of the wastewater flow showing each stage from treatment to the disposal field, including any recycled flows. An example of a flow diagram is provided at the end of this application form.

Appendix B: Assessment of Environmental Effects

An Assessment of Environmental Effects is required to support your application. This must be undertaken in accordance with the requirements of Schedule 4 of the Resource Management Act 1991 and must also assess the following discharge effects:

- ☐ An assessment of effluent quality effects based on the expected effluent quality of treated wastewater. This should be in accordance with the guidance provided below.
- ☐ An assessment of effects on groundwater, which considers and describes the underlying aquifer, the depth to groundwater (including whether the water table rises in wet conditions), the direction of groundwater flow, and use of groundwater in the locality. This must include an assessment of effects on water takes (bores) and public health. Consideration should be given to pathogens, nutrients and other relevant contaminants.
- ☐ An assessment of effects on surface water where lakes, streams, water races, drains or wetlands are within 500m of the disposal site. This must include a description of the watercourse, photographs of the watercourse and an assessment of effects on aquatic life, public health, recreation, water takes, iwi values, and how these effects will be avoided, remedied or mitigated.
- ☐ If located near the coastal marine area, and assessment of effects on contact recreation, marine ecology, and seafood gathering.
- ☐ If the disposal site is upstream/upgradient of an abstraction point for a registered drinking water supply for fewer than 501 people with drinking water for not less than 60 days each year, adverse effects of the activity on the registered drinking water supply, as required by Sections 6, 7 and 8 of the National Environmental Standards for Sources of Human Drinking Water.
- ☐ A assessment of alternative methods for treating and disposing of the treated wastewater and an explanation of why the proposed methods and location of disposal is the best practicable option.
- ☐ Details of how the proposed treatment and disposal system is to be serviced, maintained and cleaned (including regularity of services/cleaning, treated wastewater quality monitoring, discharge flow monitoring and whether a maintenance service contract will be entered into).
- ☐ Details of mitigation/contingency measures proposed in the design to minimise any adverse effects (e.g. back up provisions, wet weather contingency plans, maintenance /servicing schedules, copies of operations and management plans).
- ☐ Details of any other monitoring and management proposed to ensure any potential environmental effects on the environment are avoided, remedied or mitigated. (Include details on what is to be monitored, when, how and why).

Example of wastewater flow diagram