

APPLICATION FOR RESOURCE CONSENT

Office Use Only



ONSITE SEWAGE WASTEWATER DISCHARGE TO LAND

Location

Please provide details/a detailed map of where the activity will occur.

You must supply a location map or diagram on a separate sheet of paper that shows the site of your activity and its local environment. This helps us determine what or who may be affected by your proposal. Please show:

- orientation (North arrow and scale)
- site location
- the location of proposed waste water system
- the location and name of the nearest road or state highway, and any roads, tracks, buildings
- location/s of the activities for which you are applying for consent (point of discharge, to air or water, areas for disposal)
- property boundaries and neighbouring properties (as well as neighbouring property owners' names)
- if applicable, a Certificate of Title
- location and names of any nearby natural features such as geothermal activity, waterways (rivers, stream/creeks and drains), wetlands or wildlife habitats
- historic or waahi tapu sites
- the location of any wells/bores

Note: West Coast Regional Council can help you create a base map to assist with your location plan. Please call us on (03) 768 0466 or 0508 800 118 during office hours for assistance, or call in to our office at 388 Main South Road, Paroa, Greymouth.

Site Plan

Please show on a scale plan:

Treatment System

Location
Distance from land application area
Distance from dwelling/s

Land Application Area

Location
Area
Dimensions
Distance from boundaries
Location of effluent lines
Distance between effluent lines

Reserve Area

Location
Area
Dimensions
Distance from boundaries

Stormwater Management

Location of stormwater drains

Bore/well (if relevant)

Location
Distance to land application area
Distance to reserve area

Surface water body (if relevant)

Location
Distance to land application area
Distance to reserve area

Property

Boundary dimensions

Cross Section Lines

(e.g. Section A – A, as per next page)



Extra Notes: the information required here could be
1. drawn up by your contractor/waste engineer
&/or superimposed on an enlarged property map from Council

Cross Section Drawings

NOTE: See APPENDIX II at the end of this document for drawing examples



As relevant to your system, please show:

- Location of ground level with dominant slope angle
- Location of effluent lines
- Depth of effluent lines
- Dimensions of pipes
- Dimensions of soakage trench
- Height of raised bed
- Type of trench/raised bed fill material
- Depths of any fill materials
- Use of trench liners
- Any other buried pipes/drains

Is this consent application seeking to replace an existing one?

Yes No

If yes, please ensure you complete the section “Value of Consent Holder Investment” on Form 1: Administration.

If yes, what is the current consent number?

Description of Activity

Planning Information

Is this application for a communal subdivision sewage system?

Yes No

If yes, how many lots will the system be servicing?

Is there a public reticulated system nearby or is one being proposed nearby?

Yes
 No
 Don't know

If yes, why aren't you connecting to this?

Key site details

What is the area of the property?

 Square Metres Hectares

Are there any other dwellings on the property?

Yes No

If yes, give brief description of any other wastewater systems already in place

What will the distance from the proposed disposal field to the nearest dwelling be?

What is the slope of the proposed disposal field area? (*tick the appropriate box*)

Less than 12 degrees (almost flat)
 Between 12 and 25 (moderate slope)
 More than 25 degrees (steeper slope)

NOTE: see APPENDIX I at end of this document for tips on working out your slope angle

Site Drainage & Soakage Capacity

NOTE: Accurate establishment of the soakage capacity of the receiving medium will be vital to your plans. If you need help ask a WCRC Consents Officer for advice or/and engage a drainage expert.

Which of these methods did you use to establish the soakage capacity of your proposed disposal field?

- Permeameter testing
 Percolation testing
 Engaged an engineer to do a report

NOTE: Attach all Test Results and/or your Engineer's Report to the end of this form.

Under what conditions was soakage capacity, as per your chosen method, carried out?

Include the following: weather on the day/s tests were done, rainfall data for the previous 7 days, state of the ground visually (dry damp, wet etc)

Was any groundwater encountered during this test?

- Yes No

If yes, at what depth? mm Metre

What is the estimated winter groundwater level for the disposal area?

How did you calculate this level?

What is the main soil type for your proposed disposal area? (Tick appropriate box/es)

NOTE: the soil types given here are from the AS/NZS Industry Standard 1547:2000. If necessary ask a WCRC Consents Officer if you need help with determining your soil type.

- gravel and sand
 sandy loam
 loam
 clay loam
 light clay
 medium to heavy clay
 peat

Complete a soil profile to a depth of 4-5 metres as part of your explanation.

NOTES:

Utilise list from above to mark in **Soil Types**

Under **Notes**, mark at what levels you encountered groundwater, any iron pans and any other comments

Photograph/s taken of the test pit showing soil structure, iron pan levels, groundwater etc would be advantageous for this section: label and attach to the application

Depth	Category	Soil Description
0m		
1m		
2m		
3m		
4m		
5m		

Notes

How will stormwater runoff be managed for this site? Describe below and ensure drains are marked on a Location Map.

NOTE: it is imperative that stormwater runoff is diverted away from any proposed sewage disposal field

Are there any bores/wells within 100m of the edge of the disposal field?

Yes No

If yes, ensure these are marked on a Location Map and Site Plan, then list the details here:

Are there any surface water bodies or drains within 50m of the edge of the disposal field?

Yes No

If yes, ensure these are marked on a Location Map and Site Plan, then list the details here:

Discharge Volume

To ensure the proposed system will cater for the loading on it, accurate user information is necessary.

What is the source of the wastewater? *Tick the box beside your residence type and put the maximum number of people who will use the system per day in the space*

Use	Number of bedrooms if applicable	Occupancy (number of people/guests)
<input type="checkbox"/> House		
<input type="checkbox"/> Bach/holiday home		
<input type="checkbox"/> Motel/hotel		
<input type="checkbox"/> Cafe/Restaurant		
<input type="checkbox"/> Motor Camp/camping ground		
<input type="checkbox"/> Educational Institution/School		
<input type="checkbox"/> Community hall/Marae/Sports Club		
<input type="checkbox"/> Other		Please describe in the space below

What volumes of wastewater will be discharged as per your selection above?

Maximum volume per day? (Litres)

Maximum volume per week? (Litres)

How did you calculate this?

What will the maximum discharge rate be?

litres/day

Treatment System Details

Which type of wastewater system do you intend to use? *Make a choice then answer the associated questions in the spaces provided.*

Septic tank/s

Aerated Wastewater Treatment System (AWTS)

Other type of system

Explain here why you made this choice.

Septic tank/s

Will the septic tank system have more than one tank?

Yes

No

If yes, how many tanks are proposed?

Will there be a filter in the tank/s?

Yes

No

What will the total capacity of the septic tank/s? be?

litres

Aerated Wastewater Treatment System (AWTS)

What brand will your AWTS be?

Other Type of System

Give a brief description of your other wastewater treatment system here then attach the details of this system to this application.

Who will be responsible for the regular servicing/cleaning/maintenance of your chosen wastewater treatment system?

- The supplier of the system
- The property owner/s

If relevant, please attach a copy of your service or maintenance contract to this application and note here when will this

Start?

Terminate?

Outline the proposed maintenance programme, including tasks to be undertaken and frequency.

Will you be carrying out any further effluent treatment?

- Yes No

If yes, which one will you use?

- UV Disinfection
- Chlorination
- Sand Filter
- Other additional treatment (*outline here*)

What is the expected quality of the discharged effluent?

BOD ₅		milligrams/litre
Faecal coliforms		cfu/100ml
Suspended Solids		milligrams/litre
Total Nitrogen		milligrams/litre

Where did you get this data from?

Write any other information/comments about the discharge quality here:

Disposal System

Which system for disposing of wastewater to land have you chosen? *Choose one of the 3 options then answer the associated questions.*

- Soakage Trench/Bed System
 Irrigation Lines
 Other Disposal System

Soakage Trench/Bed System

What are the dimensions of the proposed soakage trenches/beds?

Width

Metres

Depth

Metres

What is the total length of all the soakage trenches/beds?

Metres

How will the soakage trench/bed be loaded? (*tick appropriate box*)

Trickle

Dose-loaded via:

Pump

Flout

Siphon

Has a reserve area of undeveloped land, the same size as the proposed disposal area, been allowed for in the disposal system design?

Yes

No

If no, what percentage has been allowed and why less than 100%?

What is the proposed effluent loading rate to the trenches/beds?

mm/day

Irrigation Lines

Type of irrigation system (*tick appropriate box*)

Pressure Compensating Dripper Irrigation (PCDI)

Low Pressure Effluent Distribution (LPED)

What is the total length of the irrigation lines?

Metres

What is the distance between adjacent irrigation lines

Metres

What is the distance between adjacent drip emitters along the irrigation line?

Metre

What brand is the irrigation line?

What is the proposed loading rate to the disposal area? mm/m²/day

Other Disposal System (please describe or/and attach details)

What vegetative groundcover are you planning for the disposal area once the system becomes operational? *(Use the space below to list any existing cover and all other species you intend to plant. The remaining space could also be used for sketching these plans).*

Assessment of Environmental Effects

Read this statement:

Onsite sewage and wastewater discharges have the potential to cause significant environmental effects and health issues. As an applicant you need to identify all the possible effects the proposed discharge could have and then show how you can avoid causing them or how you can mitigate them (i.e. reduce the effects to a level the council will approve of).

Identification of Environmental Effects

Has your proposal got the potential to cause:
(Read the list below and tick the boxes relevant to this application)

Reduction of downstream water quality?

Yes No

If no, explain why not

Contaminate groundwater supplies

Yes No

If no, explain why not.

Reduction in the public amenity value of a well used local recreational area?

Yes No

If no, explain why not.

Any adverse effects on an area valued by iwi/hapu for food gathering or other cultural activities?

Yes No

If no, explain why not.

Any adverse effects on a known significant site (i.e. archaeological, historical, heritage, geopreservation, Maori or other special site)?

Yes No

If no, explain why not.

Effects other than those listed above? *(give a short explanation)*

Avoidance - Mitigation Methods

List below the items you ticked **Yes** to in the previous question (*one item per set of lines*). *These are the environmental effects you have identified which your proposed operation has the potential to cause.*

Briefly describe against each of the items you have identified, the method/s you will use to avoid causing those effects OR to mitigate them. *You should refer back to other parts of this application form as relevant and attach any extra sheets to the end of this form.*

Monitoring

Who will be monitoring the discharge system to ensure it is working satisfactorily?

How often will this be done?



THE WEST COAST
REGIONAL COUNCIL

388 Main South Road, Paroa, Greymouth 7805
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Appendix I

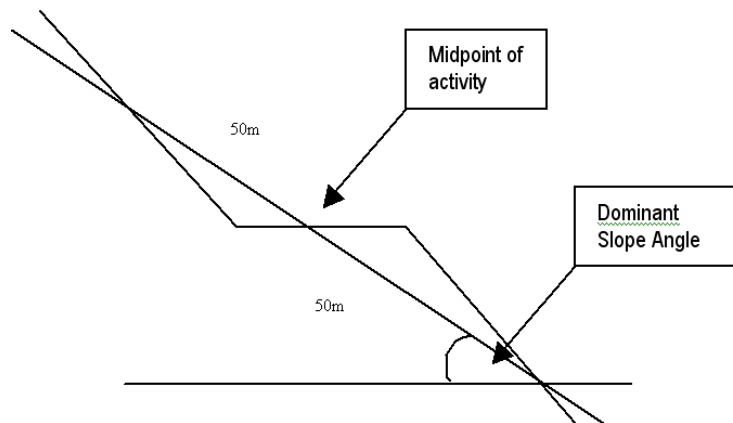
Dominant Slope Angles

This information is to help you work out the dominant slope angle for your proposed disposal field site.

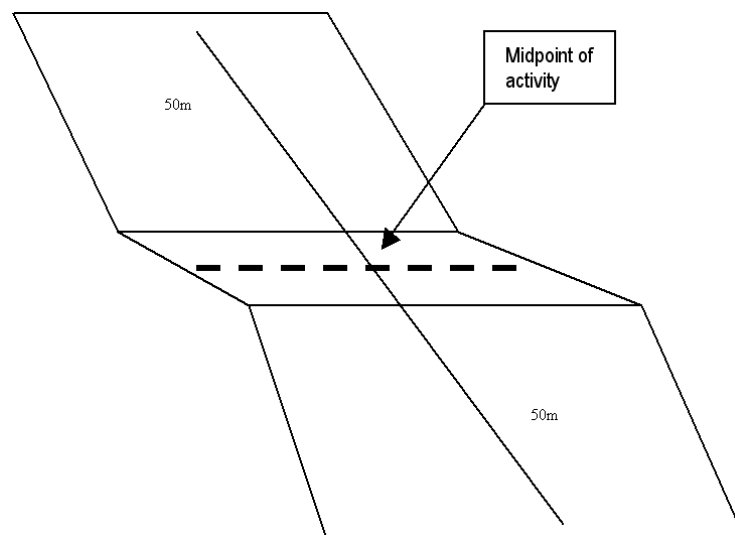
Basically the dominant slope angle is the overall slope of the land when you have “ironed out the bumps.” Consequently you need measuring points well above and below your site. Ask for Consents Staff advice if you have problems working this out for your site.

The diagrams shown are an example of how slope angle is measured for a benched slope. The dominant slope angle is the one between a point 50 metres upslope of the activity and a point 50m downslope of the activity. If there is a stream or other waterbody downslope, run the line of angle through to a point at stream centre, high flow, then measure the angle.

Side View



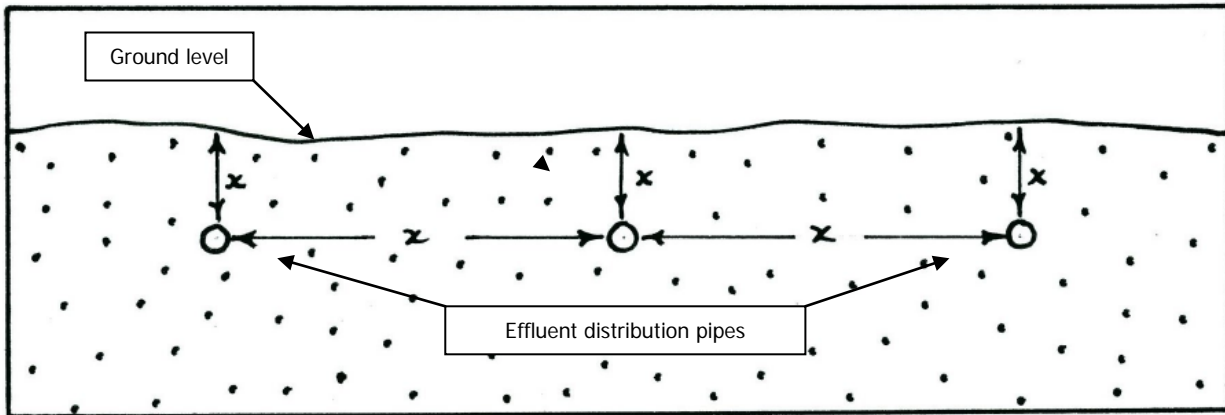
Oblique View



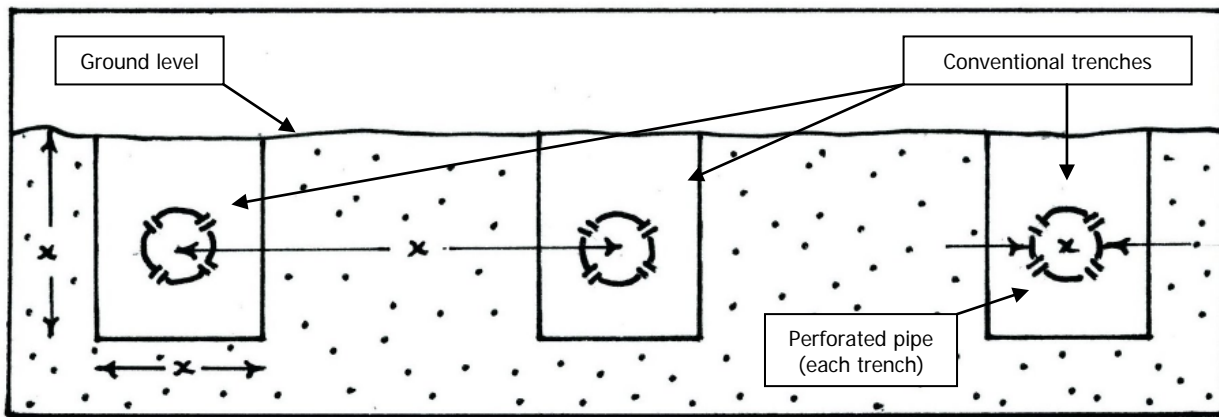
Appendix II

Examples of Cross Section Drawings

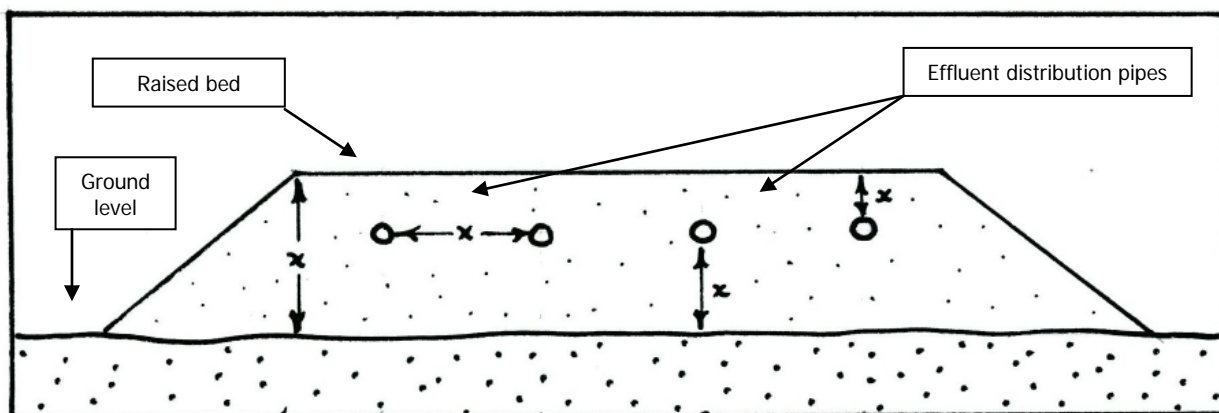
NOTE: Ensure you put the specifications 'x' on your Cross Section drawing



1. Cross section diagram for a subsurface irrigation system



2. Cross section diagram for a conventional trench system



3. Cross section diagram for raised bed system

OBJECTIVES, POLICIES AND RULES THAT MAY BE RELEVANT TO ONSITE SEWAGE WASTEWATER DISCHARGE TO LAND

This may not be a complete list, please consult with a Council Consents Officer if you require further information.

REGIONAL LAND AND WATER PLAN

Objective

13.2.1 To ensure that the adverse effects from the discharge of liquid contaminants into or onto land, on water and soil quality, social, cultural, and amenity values, and human health are avoided, remedied, or mitigated.

Policy

13.3.1 To ensure that the discharge of liquid contaminants into or onto land is of a nature or at a rate that does not exceed the ability of the land to assimilate the contaminant, and does not result in soil contamination.

Explanation

The discharge of contaminants such as sewage to land relies upon the soil system to assimilate the contaminants. Where the soil cannot assimilate the contaminant, the contaminant is likely to reach water and may also have adverse effects on human health, cultural or amenity values. Effects of soil contamination include, for example, loss of capacity for pasture, crop or vegetation growth, rendering crops or pasture unsuitable for human or stock consumption, or loss of microbial activity and natural biodiversity in soil.

Rule 79. On-site discharge of sewage effluent

The discharge of any sewage effluent into or onto land, other than septage, from on-site sewage treatment and disposal systems is a **permitted activity**, provided that all of the following conditions are met:

- (a) The discharge does not exceed:
 - i) a maximum of 2000L per day for secondary treatment systems; or
 - ii) a maximum of 14,000L per week for other systems; or
 - iii) a maximum of 1.3 cubic metres of greywater per day;
- (b) The discharge is not within:
 - i) 50 metres of any surface water body; or
 - ii) 50 metres of the coastal marine area; or
 - iii) 100 metres of any bore or well used for potable water supply, where the discharge is from a soak pit and there are no adverse effects on any take of water for human consumption; or
 - iv) 50 metres of any bore or well used for potable water supply where the discharge is from other treatment systems; or
 - v) 20 metres of any drain; or
 - vi) 1 metre of the groundwater table; andunless the system was installed before 1998 and is not contaminating water.
- (c) For systems other than soak pits, the hydraulic design loading rates for a disposal field shall not exceed those recommended for Category 1-3 soils in AS/NZS1547:2000¹² 'On-site Domestic Waste Water Management', unless the system was installed before 1998 and is not contaminating water; and
- (d) The greywater discharge is not within:
 - i) 20 metres of any surface water body; or
 - ii) 20 metres of any coastal water; or
 - iii) 20 meters of any bore or well used for potable water supply, and there are no adverse effects on any take of water for human consumption; or
 - iv) 0.6 metres of the groundwater table; and
- (e) There is no ponding, runoff, or surface breakout; and
- (f) No stormwater enters the system; and
- (g) The discharge does not pose a risk to human health, and is not noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment; and
- (h) For systems which use a disposal field, the system is designed to provide for even distribution of effluent to the entire filtration surface; and
- (i) For systems which discharge onto land:
 - i) The discharge is not by way of spray irrigation, or otherwise produces any aerosol discharge to air; and

- ii) The effluent is evenly distributed over the entire area of the disposal field; and
- iii) The effluent conforms to the following standard:
 - BOD5 not greater than 20mg/litre;
 - Suspended solids not greater than 30 mg/litre;
 - Faecal coliforms not more than 1000/100 mls.

Notes:

- 1) The volumes stated in condition (a) are equivalent to the amount of effluent produced by approximately 10 people.
- 2) For condition (b), the setback depth from the groundwater table should be based on the maximum water table level of the groundwater.
- 3) The Council will accept as compliance with condition (g) an on-site sewage treatment and disposal system designed, constructed, operated and maintained in accordance with The New Zealand Manual of Alternative Wastewater Treatment and Disposal Systems, Volume II, Part A: On-Site Wastewater Disposal From Households and Institutions Technical Publication No 58, Third Edition (Gunn, 2004), AS/NZS1546 2008, Parts 1, 2 and 3 'On-site Domestic Waste Water Treatment Units', or AS/NZS1547:2000 12 'On-site Domestic Waste Water Management'.
- 4) Condition (h) refers to both gravity-fed and dosed loading systems.
- 5) When selecting a discharge site, it should be considered whether the site for the system is subject to slippage, subsidence, erosion or inundation from any source.
- 6) For systems which discharge onto land, the standards required in condition (h) apply to the discharge at the outlet of the treatment plant, prior to discharging onto land.

Rule 80. Discharge from pit toilets

The discharge of any sewage into or onto land, other than septage, from pit toilets or long-drop toilets is a **permitted activity**, provided that all of the following conditions are met:

- (a) The discharge does not exceed 400 litres per day (calculated as a weekly average); and
- (b) The toilet is not sited within:
 - i) 50 metres of any surface water body or coastal water; or
 - ii) 50 metres horizontally of any bore or well used for potable water supply, and there are no adverse effects on any take of water for human consumption; and
- (c) No stormwater or runoff enters the system; and
- (d) Effluent from the toilet does not enter any surface water body or coastal water; and
- (e) Waste in the toilet does not accumulate to closer than 30cm to the ground surface; and
- (f) The discharge does not pose a risk to human health, and is not noxious, dangerous, offensive or objectionable to such an extent that it has or is likely to have an adverse effect on the environment.

Explanation

The setback distances in condition (b) seek to protect water bodies from contamination by allowing for filtration and breakdown of contaminants to occur. Specifying a minimum distance from the ground surface avoids raw effluent being exposed during rainfall.

Specifying an upper limit on the volume of discharge (the volume stated is equivalent to the amount of effluent produced by approximately 50-60 people) allows for evaluation of effects through the resource consent process when greater volumes of discharges, with proportionately greater potential effects, are proposed.

Rule 91. Discharge to land discretionary activity Rule

Unless permitted by Rules 72 to 86, or controlled by Rules 87 to 90, any discharge of contaminants into or onto land is a **discretionary activity**.