

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/NZS1547:2000 '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 metres 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 '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.

**EVALUATION AND INFORMATION FOR ON-SITE WASTEWATER
DISPOSAL**

1.0 SITE EVALUATION – This information and evaluation has been carried out by:

This form MUST be completed by the registered plumber/drainlayer/engineer carrying out the job.

Name:

Organisation:

Address:

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Phone: () Fax ()

2.0 SITE INFORMATION

2.1 Location Details

Legal Description (Deposited/Survey Plan #)

Owner/Occupiers Name

Site Address.....

2.2 Site Details

In order for permitted activity status to be given a site plan shall be submitted with this form:

The site plan does not need to be to scale but must contain all of the following:

- Location of proposed and existing dwellings and roads;
- Location of nearby bores or wells and whether they are used for human consumption;
- Type and size of septic tank proposed;
- Location and size of disposal area;
- Identification of all watercourses including diversions and distances;
- Existing and planned vegetation and landscaping;
- Alternative disposal areas and dimensions; and
- A North arrow.

3 SUBSOIL INVESTIGATION

3.1 Soil Strata

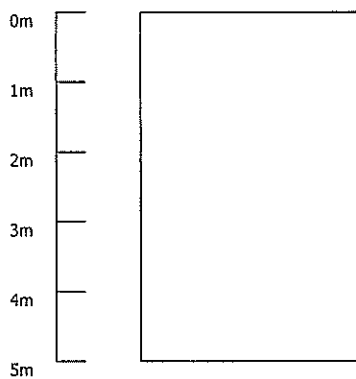
When did you dig your test pit?

Please identify in the box below the soil layers where you are proposing your disposal field.

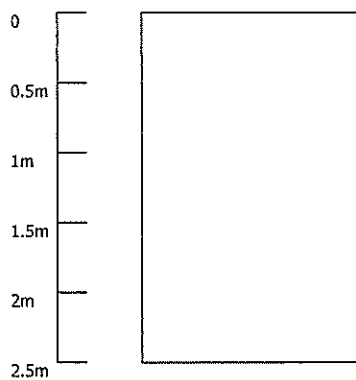
Note 1 - You need to demonstrate that you have at least 1m clearance from any ground water. This is necessary to avoid ground water contamination form your chosen disposal field.

Note 2 - Your soil strata analysis depth may depend on the system proposed. Please complete appropriate sketch box.

Sketch 1 (For Deep Test Pit)



Sketch 2 (For Shallow Test Pit)



At what length did you find the groundwater (if found)? _____

What date was the groundwater reading taken ? _____

When was the last substantial rainfall ? _____

- **Advice note:** *If the soak pit is located near the coast, the ground water reading should be taken at high tide.*

3.2 Textural Analysis

Estimate the soil category:

Table A

Soil Category	Texture	Tick One	Design Loading Rate (DLR) mm/day
1	Gravels and sands	<input type="radio"/>	25
2	Sandy loams	<input type="radio"/>	20
3	Loams	<input type="radio"/>	15
4	Clay loams	<input type="radio"/>	10
5	Light clays	<input type="radio"/>	4
6	Medium to heavy clays	<input type="radio"/>	N/A (not suitable)

Describe the method(s) you used to determine the soil category:

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3.3 Percolation Testing

Have you carried out a percolation test ? Yes/No

If "Yes" describe methods and results:

.....

4 SYSTEM DESIGNS

4.1 Treatment

How many bedrooms are in the dwelling (proposed or existing):

Table B

Number of bedrooms	Please Tick	Minimum septic tank capacity (if used)	Average daily flow rate (Q) in litres
Up to 2	<input type="radio"/>	3500	800
3	<input type="radio"/>	3500	1000
4	<input type="radio"/>	5000	1400
5	<input type="radio"/>	5000	1800
6	<input type="radio"/>	5000	2000

Describe the treatment system are you proposing (e.g. septic tank, packed bed reactor, aerated wastewater treatment system) including tank sizes?

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4.2 Disposal

How will effluent get from the treatment system to the disposal field:

- Dose loaded Pump or siphon? Brand?.....
- Gravity trickle

What type of disposal field are you proposing? i.e. soakage trenches, "on the land" irrigation, Wisconsin mound. Please attach sketch/diagram/plans/photographs.

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Why did you choose this type of disposal system?

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For soakage trenches:

What width of trench will you use?

What length of trench will you use?

$$Length = \frac{Q}{DLR \times W}$$

- Q = daily flow rate (see Table B)
- DLR = Design Loading Rate (see Table A)
- W = Trench width in metres

Example:

(3 bedroom dwelling in category 2 soil. Trench width 0.8 metres)

- Daily flow rate (Table B) Q = 1000 litres
- Design loading rate (table A) DLR = 20 mm/day
- Trench Width W = 0.8 metres

$$Length = \frac{Q}{DLR \times W} \qquad Length = \frac{1000}{20 \times 0.8} = 62.5m$$

Total Trench Length should be 63 metres

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5 COMPLIANCE WITH RULE: 79

Please tick

1. Is the discharge to the disposal area equal or less than:
- I) 2,000 litres per day for secondary treatment systems;
 - II) 14,000 litres per week for other systems;
 - III) 1,300 litres of grey water per day.
- If "No" what is the quantity of waste-water entering the field each day?
2. The discharge is not within:
- I) 50 metres of any surface water body;
 - II) 50 metres of coastal waters;
 - III) 100 metres of any bore or well used for potable water supply;
 - IV) 20 metres of any drain; and
 - V) 1 metre of the ground water table.
3. 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/NZS 1547: 2000 'On-site Domestic Waste Water Management', unless the system was installed before 1998 and is not contaminating water.
4. No ponding, flooding, runoff, or surface breakout will occur?
5. No stormwater will enter the system?
6. The discharge will not pose a risk to human health, and will not be noxious, dangerous, offensive or objectionable to such an extent that it will be likely to have an adverse effect on the environment?
7. For systems which use a disposal field the system is designed to provide for even distribution of effluent to the entire filtration surface.
8. If the system will be discharging *onto* land:
- I) This discharge is not by spray irrigation or any other spray method?
 - II) The effluent will be distributed evenly over the entire disposal area?
 - III) The effluent conforms to the following standards
 - BOD5 will not be greater than 20 mg/litre?
 - Suspended solids will not be greater than 30 mg/litre?
 - Faecal coliforms will not be more than 1000/100ml?

Assessment and system design completed by:

Signed

Date

OFFICE USE ONLY

5.0 STAFF ASSESSMENT

5.1 Compliance

Can the proposed system comply with all the conditions of Rule: *79* ? Yes/No

Has a site visit been undertaken? Yes/No

Date of site visit:

Comments from site visit:

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What follow up is required to achieve compliance (e.g. advice to client, engineers design requested, further site visit)?

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Confirm compliance with Rule *79* Yes/No

5.2 Non-Compliance

Which condition(s) of Rule *79* will the proposed system not comply with?

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If the system is does not meet the conditions contained under Rules 6 & 77has the Regional Council been advised?

Yes/No

Signed: _____

**BUILDING OFFICIAL or
ENVIRONMENTAL HEALTH
OFFICER**

Date: _____

