Official Use Only **DATE**: ..... **RECEIPT**: .....

Waitaki District Council
Private Bag 50058, Oamaru
Tel: 03-433 0300
Fax: 03-433 0358
20 Thames Street, Oamaru
New Zealand

ONSITE EFFLUENT DISPOSAL ASSESSMENT AND DESIGN.

NB. Properties under 3000m2 will need to be professionally designed

Owners Name:

.....

Postal Address:

.....

Site Address/Road: ..... Rapid No. .....

WEATHER INFORMATION

Prevailing Wind: .....

Previous Months weather: □ Wet □ Snow □ Dry □ Drought

Previous Weeks weather : □ Wet □ Snow □ Dry □ Drought

SITE DETAILS

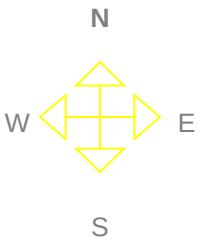
Site Area: ..... m2 /ha

Site Features: □ Exposed □ Sheltered □ Sunny □ Boggy □ Old Gravel Pit

OTHER: .....

Site Slope: □ Rise □ Fall Degree: .....

Site Orientation
Indicate using an arrow



WATERWAYS AND DRAINS

Waterways and Distance from Proposed Drains (*Check Neighbouring Properties*)

[Refer NOTE 1 at the end of this form]

NOTE: A Regional Council discharge consent will be required if:

- distances are closer than 100m for wells that are for human or stock consumption.
- distances are closer than 50m for any body of water.

Wells: ..... Pond: .....

Creek: ..... Watercourse Wet/Dry: .....

WATER SUPPLY DEMAND

Required to calculate the water usage per person. The number of bedrooms indicates the potential occupation rate.

Take into consideration sleep outs, granny flats, and other rooms that may become bedrooms.

Water Supply: □ Roof □ Rural Scheme □ Borehole

Bedrooms: ..... (Include rooms that could be used as bedrooms, *ie offices, rumpus etc*)

SEPTIC TANK DETAILS

1. The Length and Width are found by probing to find the end of the concrete, then deducting 200mm from the outside
   length and width.
   Length: ..... Width: .....
2. The Liquid Depth is found by using a dipstick down the fresh-air inlet if it is over the tank.
   Liquid Depth: .....

SOIL PROFILE Show the depth of the topsoil, subsoil, and base.

Hole to be a minimum of 200 x 200, down to solid, *or* to a depth of 1metre

Show Depths:

Topsoil Depth: .....

Subsoil Depth: .....

Base / Solid Depth: .....

☐ The **SOIL ANALYSIS FLOWCHART** completed and included *[Important!]*

SOIL CHARACTERISTICS This is your assessment of the soil or sub strata you encounter in the test holes.

Top Soil: ☐ Loose ☐ Tight ☐ Tarry ☐ Sandy ☐ Other: .....

Sand/Gravel: ☐ Large Stones ☐ Coarse Sand ☐ Fine Sand ☐ Peagravel ☐ Other: .....

Clay: ☐ Wet ☐ Dry ☐ Broken ☐ Gravelly

Other: .....

Hardpan: *Is there a hardpan below the Gravel*? ☐ Yes ☐ No

SOAKAGE (not required unless requested by the Plumbing and Drainage Officer)

The holes need to be dug down to solid or 1 meter deep the day before, ensuring the sides are left rough, and then filled with water overnight. Normally three holes are dug over the area designated for effluent disposal. The next morning the holes are filled up and marked, and the drop is measure after 30 minutes, and again after 60 minutes. The holes are then refilled, and the drop recorded after a further 120 minutes. Extra holes will be required if you are working over two different areas on the same site.

HOLE	1	2	3	4	5	6
Starting Depth (depth of hole)						
Depth after 30 minutes						
Depth after 60 minutes						
Depth after Refilling						
Depth after 120 minutes after refill						
Average drop per HOUR						
Average drop over the 3 samples						

Other Features:

1. **A site plan** is required showing all features. Note – this is for the surrounding area, NOT the whole farm.
    a. Houses, sheds, buildings
    b. Tree lines
    c. Wells, ponds, creeks, dry water courses
    d. Direction of slope
    e. Septic Tank and proposed disposal area

2. **Other features** – Any other aspects that maybe relevant on this particular site. *(ie use of buildings*)

    1.....

    2.....

    3.....

    4.....

    5.....

    6.....

3. **Soil Analysis Flowchart** – Reminder to complete and include the Soil Analysis Flowchart (it is important!)

Signature (*of person doing evaluation*): .....

Dated ...../...../.....

NOTE 1

Extract from Otago Regional Council Water Plan 12.6.1.4

The discharge of human sewerage through any on-site waste water treatment system, installed after 28 February 1998, onto

or into land is a *permitted* activity, providing:

- The discharge does not exceed 2000 litres a day (calculated as a weekly average); **AND**

The discharge does not occur in the Shag Point or Kakanui-Kaura Groundwater Protection Zones as identified on mapsC4, C5, and C6; **AND**

The systems disposal field is sited more than 50 metres from any surface water or body, or mean high water springs; **AND**

- The systems disposal field is sited more than 100 metres from any bore used to supply water for domestic purposes or

drinking water for livestock; **AND**

- Effluent from the system does not enter any body of water or the coastal marine area; **AND**
- Effluent does not run off to any other person's property; **AND**
- The discharge does not cause flooding to any other person's property, or erosion.

On-Site Sewage Disposal Evaluation

Date: …… Receipt No.....…….....

Owner:……..

Site Address: Rapid No:……..Road:……...……

Legal Description: Lot ……. Sec …….Blk …….D.P..……Plan ……...…..

Valuation Number: ..……

Area of Land: ……

Regional Council ORC □ CRC □

Name of Person who did assessment ……Phone No. ……..…….

Water Supply: Roof Supply □ @ 140 litres/day Community or Borehole □ @ 200 litres/day

Number of Bedrooms …… x …… = occupants (This includes rooms that could be possible bedrooms, such as office, rumpus etc) Refer TP58

Water Usage ……per day x ……. occupants = …….. litres

Area Required for Soakage: refer TP58 Page 67 and Commentary On Site Newz 96/1

Existing Septic Tank Capacity Length…… Width…… Liquid Depth…… = Capacity…...

Soil Category	Soil Type	Loading Rate mm/day (Conservative)	
		Least	Most
1	Gravel, coarse sand – rapid draining (Special effluent distribution techniques required, e.g. LPED)	70	50
2	Coarse to medium sand – free draining	50	35
3	Medium fine and loamy sand – good drainage	30	20
4	Sandy loam, loam and silt loam – moderate drainage	22.5	15
5	Sandy clay, clay loam and silty clay loan – moderate to slow drainage	15	10
6 & 7	Clay type soils of slow to non-draining characteristics	Conventional Trenches not appropriates	

Usages ……litres ÷…… mm as per category = …….m^2 of soakage required

Recommendations: ……
……..
……..
……..
Signed:

Designation:

SOIL ANALYSIS FLOWCHART

The numbers and definitions associated with the analysis chart are indicative only.
Always err on the **conservative side** when completing this chart.
Please *circle*, the end number of your assessment – it indicates the soils **max loading** in mm per day.

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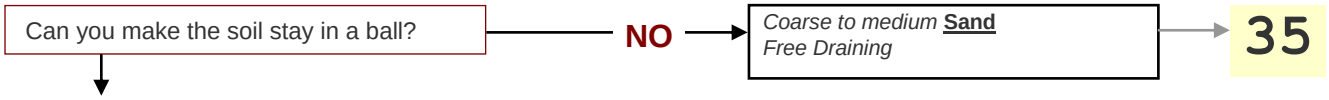
1. Collect enough dirt to make a 3-5 cm ball. Use your fingers to break up all the lumps. Add water, one drop at a time until the soils has the feel of playdough.



2. Hold the ball between your fingers and thumb. Squeeze the ball with your thumb to make a snake of the soil. Make the snake the same width and size as you squeeze. Do not roll the soils – only squeeze. Allow the snake to grow over the edge of you fingers and break from the weight of the soil hanging.