

Resource Consent Application for the Discharge of Agricultural Effluent (PART B)

This application is made under Section 88 of the Resource Management Act 1991



A complete Part A form needs to be provided with this Part B form. The purpose of this Part B form is to provide applicants with guidance on information that is required under the Resource Management Act 1991. These forms are to act as a guide only and Environment Southland reserves the right to request additional information.

Section A: Application details

1. Please provide details of your existing resource consent to discharge agricultural effluent:

- (a) Consent number _____
- (b) Expiry date _____

2. What is the maximum number of animals from which you propose to collect effluent from under this resource consent application?

_____ animals

Note: if you wish to increase the size of your milking herd, this form is not suitable for your use. Please contact Environment Southland staff for more information.

Section B: Location of discharge and description of surrounding environment

3. Location of the proposed discharge:

- Address: _____
- Map reference: _____
- Legal description _____

4. Please complete the following tables which tell us about your property and effluent disposal area. Information can be found on the Environment Southland Website in the Beacon application, or by contacting Environment Southland.

Property Details:-	
Total Farm Area (ha)	
Effective Farm Area (ha)	
Size of effluent disposal area (ha)	
Stocking rate	
Freshwater Management Unit	

Effluent Disposal Area Details					
Soils	Soil Type	Vulnerability Factors			
		Structural Compaction	Nutrient leaching	Waterlogging	
FDE land classification	Category A – Artificial Drainage or coarse soil structure				
	Category B – Impeded drainage or low infiltration				
	Category C – Sloping land (over 7 degrees)				
	Category D – Well drained flat land				
	Category E – Other well drained but very stony flat land				
Physiographic zone (s)	Zone	Contaminant pathway(s) for Physiographic zone			

5. Are there any permanent or intermittent rivers, streams, lakes, drains, ponds or wetlands within 20 metres of the discharge area?

- Yes (Go to question 6)
- No (Go to question 7)

6. Features of the rivers, streams, lakes, drains, ponds or wetlands within 20 metres from the discharge area include:

- (a) signs of instream life (e.g. fish, eels, bullies, crayfish, native birds, frogs)
- (b) areas where food is gathered from a water body (e.g. watercress, eels, wildfowl)
- (c) bird nesting habitats
- (d) areas of particular aesthetic, cultural, heritage or scientific value (e.g. archaeological sites)

Yes	No

7. Are there any bores or soak holes within 20 metres of the discharge area?

Yes No

8. Are you proposing to discharge effluent within:

- (a) 20 metres of any lakes, rivers, ditches, drains, wetlands, or the coastal marine area?
- (b) 200 metres of a house on a neighbouring property or a public place such as a school or community hall?
- (c) 20 metres of a property boundary?
- (d) 100 metres of a bore?

Yes	No

8.1 If you are proposing to discharge effluent within these distances, what (if any) are the separation distances you are proposing?

- (a) surface waterbodies
- (b) artificial watercourses
- (c) subsurface drains
- (d) the coastal marine area
- (e) residential dwellings and places of assembly
- (f) landholding boundaries
- (g) water abstraction points
- (h) registered drinking water supplies

Metres from discharge area

9. Please attach a scaled farm plan or a coloured aerial photograph, showing:

- farm boundaries;
- paddock boundaries;
- effluent disposal paddocks (numbered and size in hectares);
- irrigation system layout;
- tile drains/mole drains;
- streams, rivers, farm drains, springs and wetlands;
- bores within 100 m of the disposal area;
- any known water abstraction points within 100 m of the disposal area;
- buildings (houses, sheds, wintering pads) and/or other places of assembly;
- effluent storage pond(s) and any effluent treatment infrastructure;
- cow races;
- dairy shed location;
- any other discharge areas (such as whey);
- any areas prone to flooding;
- any swampy areas (i.e. where water builds up in the sediments close to the ground surface above layers of poorly draining soils) within the discharge area.

Section C: Description of proposed activity

10. Dairy shed effluent

- (a) How many cows will be milked each day? _____
- (b) How many times per day will you milk (maximum)? once/twice/three times per day
- (c) What is the length of the milking season? (please include dates) _____ days

(dates)
- (d) What is the volume of wash down effluent generated per day? _____ (litres/day)

11. Winter milking

- (a) Does your milking season include winter milking? _____
- (b) If yes, what is the number of cows to be milked in winter? _____ cows
- (c) How many times per day will you milk once/twice/three times per day
- (d) Dates of winter milking season _____ (provide dates)

12. Feed pad/wintering pad/stand-off pads

- (a) Number of cows on feed/wintering/stand-off pad _____ cows
- (b) What is the size of the area? _____ square metres
- (c) Is the feed/wintering/stand-off pad roofed? _____ Yes/No
- (d) Is rainwater diversion in place? _____ Yes/No
- (e) Is it mechanically swept? _____ Yes/No
- (f) If it is washed down, amount of water used _____ litres/day
- (g) How is effluent from this facility disposed of? _____
- (h) Intended length of time the area is to be used _____ days per year

13. Please describe any other sources of effluent that is collected for discharge e.g. stock underpasses and silage pads

14. Total volume of effluent:

Using your answers to questions 11-14 (above) what is the total volume of effluent to be discharged (in cubic metres/day)?

Effluent irrigation rate and method

15. Please describe how effluent will be collected, treated and discharged to land and when it will be discharged to land:

Proposed instantaneous effluent application rate* _____ mm/hr

Proposed effluent application depth _____ mm per application

*This is the depth of effluent that would be applied to a soil surface if the irrigation system was run continuously for one hour.

16. Has the effluent irrigator discharge rate been checked and calibrated recently? This is particularly recommended for high rate irrigators.

Yes No

If yes, then please include the results of the test.

Section D: Storage facility

17. What volume of effluent storage and treatment do you have on site (m³)?

Please include a Dairy Effluent Storage Calculation to show that you have, or will have sufficient effluent storage.

Effluent Pond/Tank	_____	Cubic metres
Sump(s)	_____	Cubic metres
Weeping wall/sludge bed	_____	Cubic metres
Other (please specify)	_____	Cubic metres

18. Are you increasing storage on site?

- Yes (Go to question 19)
No (Go to question 20)

If you are increasing your storage then please complete the land use consent application form for effluent storage.

19. By how much and to what volume?

_____ Cubic metres

20. When was your effluent storage and treatment installed?

21. Has your current effluent storage pond, tank or structure been certified by a Chartered Professional Engineer as being structurally sound?

- Yes No

22. Have you undertaken an Effluent Pond Drop Test that has been certified by a Chartered Professional Engineer?

(Refer to Appendix P of the proposed Southland Water and Land Plan for the Effluent Pond Drop Test methodology (shown at the back of this form))

- Yes No

If you have certification from a Chartered Professional Engineer, please attach the certification to your consent application

23. Pond level drop

Information in this section will be known if you have had a drop test performed on your existing pond. Please contact the Consent Authority for advice as to whether or not you need to perform this test on your storage.

(a) What is the pond level drop for your storage facility? _____ (mm per 24 hours)

(b) What is the maximum depth of your pond (excluding freeboard) _____ (metres)

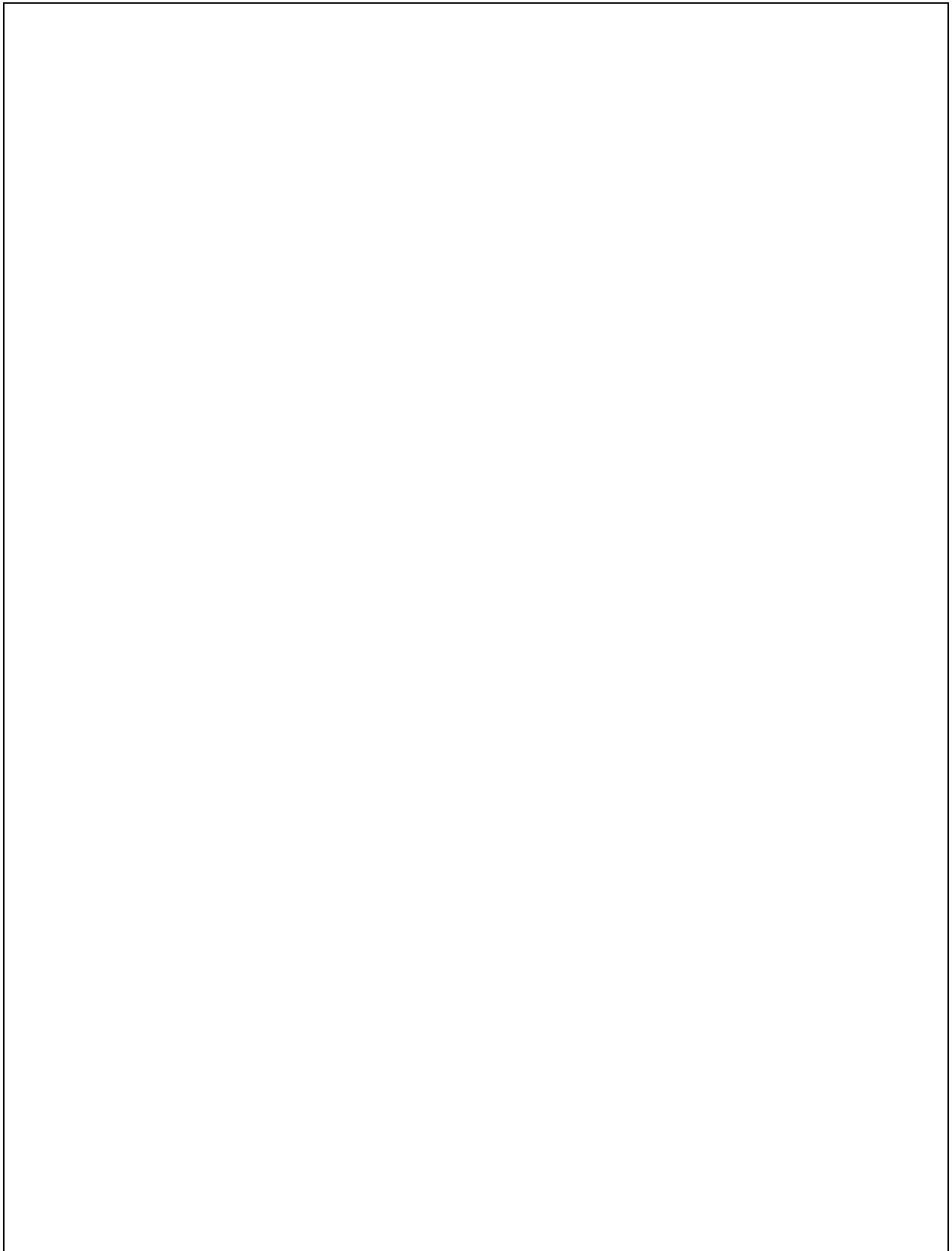
(c) Does your pond level drop exceed the maximum allowable pond level drop (see table below)?

Yes No

Maximum Depth of Pond (m) excluding freeboard	Maximum Allowable Pond Level Drop (mm per 24 hours)
<0.5	1.2
0.5 to 1.0	1.4
1.0 to 1.5	1.6
1.5 to 2.0	1.8
>2.0	2.0

Section E: Assessment of Effects

24. Please describe any possible long term or short term effects the discharge may have on the quality of the receiving environment and including effects on water bodies, biota (plant and animal life), soil quality, and human health:



Section F: Good Management Practices and Mitigation Measures

Please include a description of the monitoring or good management practices to be undertaken to help avoid, reduce, remedy or mitigate the actual or potential effects on environmental features and values.

25. Are there any times when you will avoid disposing the effluent to land?

- Yes No

If **yes**, please indicate below the times you will avoid effluent disposal

- (a) When there is snow on the ground _____
- (b) Areas where food is gathered from watercourses (e.g. watercress, eels, wildfowl)? _____
- (c) When rainwater or irrigation water has ponded on the land surface _____
- (d) When the soil temperature is at or below 5 degrees Celsius _____
- (e) When the soil moisture conditions as per Council’s monitoring site, or my own soil moisture site say it is unsuitable _____
- (f) Other (please state) _____

To minimise the risk of adverse effects from odour and spray drift, it is recommended that effluent shall not be discharged within 20 metres of the property boundary or 200 metres of any residential dwelling other than those on the subject property. If you cannot adhere to this buffers, then please describe what effects there may be beyond the property boundary resulting from odour and/or spray drift.

26. **What contingency plans do you have in place in the event you are unable to discharge the effluent to land, including during bad weather conditions or if any equipment breaks down:**

Examples: The capacity of my storage facility is sufficient to defer irrigation in unfavourable weather conditions; or I plan to have the effluent taken off my property.

27. **What alternatives have you considered, and why have you chosen the method and location stated in the application?**

Possible alternatives:

- Different form of irrigator
- Discharge to land under all conditions
- Further treatment of the effluent prior to discharge
- Discharge to a waterway
- Discharge offsite (such as a sewerage treatment plant or to another property)

Potential reasons for selection:

- The proposed method of discharge will have least adverse effect on the environment than other methods, will provide beneficial reuse of nutrients in the effluent, and is consistent with ES' policies and best practice guidelines
- Cost and ease of use compared to other options
- Utilises existing infrastructure
- Further treatment would increase complexity and cost, and would create additional wastes that need disposal.

28 What good management practices will you use to avoid or mitigate the effects and the risks of your discharge to the environment? For example: low rate effluent discharge. These can be found on the Environment Southland website, including on the relevant Physiographic zone information sheets.

My maintenance for my effluent system includes:

The checks I will undertake on my effluent storage and treatment and disposal system to ensure it is not leaking or is not broken are:

I monitor my effluent discharge by:

Section F: Other matters

29. Please specify the duration sought for the resource consent:

_____ years

Please say why you think this consent duration is appropriate for your operation:

30. Do you have a current collected agricultural effluent management plan?

- Yes No

This plan can be part of the plan that you have prepared for your farm to meet the requirements of Appendix N of the proposed Plan. If you do have a plan which sets out how you manage your effluent then please include it in this application.

31. Have you identified any parties which may be affected by the activity?

- Yes No

If **yes**, please indicate below

- (a) Neighbours _____
- (b) Other consent holders in the immediate area _____
- (c) Department of Conservation _____
- (d) Iwi (Te Ao Marama Inc; Te Rūnanga O Ngāi Tahu) _____
- (e) Local authorities _____
- (f) Fish & Game New Zealand _____
- (g) Other (please state) _____

Please include evidence of any consultation undertaken for this application.

Section G: Planning Assessment and Declaration

The Resource Management Act 1991 requires you to make your own assessment of your proposal against relevant policies. A separate planning assessment sheet is available to use, or you can do your own assessment. The planning assessment can be found on our website, under the application forms. An assessment must be included with your application.

I hereby certify that to the best of my knowledge and belief, the information given in this application is true and correct.

I undertake to pay all actual and reasonable application processing costs incurred by Environment Southland.

Name (please print) _____

Signed _____

Date _____

(Signature of applicant or person authorised to sign on behalf of applicant)

END OF FORM