

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 | <u>AUTH-20211143-02</u> |
| (b) Expiry date | <u>25 June 2026 (Previous consent on farm)</u> |

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

956 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: | <u>444 Springhills -Tussock Creek Road, Springhills</u> |
| Map reference: | <u>1249823E 4872356N</u> |
| Legal description | <u>Part Lot 2 DP 2005, Lot 1 DP 12811, Section 298 Forest Hill HUN, Lot 2 DP 13790, Lot 1 DP 4795, Section 517 Forest Hill HUN, Lot 3 DP 13790 and Lot 1 DP 13793</u> |

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)	340.14 ha
Effective Farm Area (ha)	315 ha
Size of effluent disposal area (ha)	140 ha
Stocking rate	approximately 1.9 cows/ha
Freshwater Management Unit	Makarewa

Effluent Disposal Area Details				
Soils	Soil Type	Vulnerability Factors		
		Structural Compaction	Nutrient leaching	Waterlogging
	Pukemutu (+ Braxton)	High	Moderate/ slight	High
	Makarewa	High	Slight	Very High
	Te Mara	Moderate	High	High
	Kuna	Low	Very High	High
FDE land classification	Category A – Artificial Drainage or coarse soil structure			<input checked="" type="checkbox"/>
	Category B – Impeded drainage or low infiltration			<input type="checkbox"/>
	Category C – Sloping land (over 7 degrees)			<input checked="" type="checkbox"/>
	Category D – Well drained flat land			<input type="checkbox"/>
	Category E – Other well drained but very stony flat land			<input type="checkbox"/>
Physiographic zone (s)	Zone	Contaminant pathway(s) for Physiographic zone		
	Gleyed	Artificial drainage, overland flow		
	Bedrock/Hill Country	Deep drainage, overland flow, artificial drainage		
	Peat Wetlands	Deep drainage, lateral drainage and artificial drainage		

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)

Buffers will be in place between waterways and effluent discharge area

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
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

7. Are there any bores or soakholes 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
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

- | | Metres from discharge area |
|--|-----------------------------------|
| (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 | _____ |

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.

Please see AEE and Farm Environment Plan

Section C: Description of proposed activity

10. Dairy shed effluent

- | | |
|--|--|
| (a) How many cows will be milked each day? | 640 |
| (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) | 365 days |
| | All year (dates) |
| (d) What is the volume of wash down effluent generated per day? | max 50 (litres/day) |

11. Winter milking

- | | |
|--|--|
| (a) Does your milking season include winter milking? | Yes |
| (b) If yes, what is the number of cows to be milked in winter? | upto 640 cows |
| (c) How many times per day will you milk | once / twice / three times per day |
| (d) Dates of winter milking season | 1/06 - 31/8 (provide dates) |

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

(a)	Number of cows on feed/wintering/stand-off pad	<u>840</u>	<u>cows</u>
(b)	What is the size of the area?	<u>8,240</u>	<u>square metres</u>
(c)	Is the feed/wintering/stand-off pad roofed?	<u>Yes</u>	<u>Yes/No</u>
(d)	Is rainwater diversion in place?	<u>Yes</u>	<u>Yes/No</u>
(e)	Is it mechanically swept?	<u>Yes</u>	<u>Yes/No</u>
(f)	If it is washed down, amount of water used	<u>-</u>	<u>litres/day</u>
(g)	How is effluent from this facility disposed of?	<u>To storage, then applied to land</u>	
(h)	Intended length of time the area is to be used	<u>approx 152</u>	<u>days per year</u>

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

See Table 4.5 in AEE

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)?

Please see attached DESC for volume of effluent and storage requirements

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:

Please see AEE for detailed information

Proposed instantaneous effluent application rate*

See AEE 5 - 10 mm/hr

Proposed effluent application depth

5 - 25 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.

- No
 Yes

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	<u>17,800</u>	Cubic metres
Sump(s)	<u></u>	Cubic metres
Weeping wall/sludge bed	<u>288m³ and 264 m³ weeping walls and sludge bed</u>	Cubic metres
Other (please specify)	<u></u>	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?

5000 to 17,800 Cubic metres

20. When was your effluent storage and treatment installed?

Proposed to be installed in late winter 2022

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

- No Will be certified prior to use.

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 Existing ponds have drop test completed and are certified by a Chartered Professional Engineer
No Proposed new pond will be synthetically lined, designed to standard and expected to meet Appendix P requirements. Drop tests will be completed as part of effluent management plan.

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)?

<input type="checkbox"/>	No
<input type="checkbox"/>	Yes

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:

Please see AEE for more information

- 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.

Storage capacity is sufficient to delay irrigation until conditions are favourable and emergency irrigation plan is in place, which includes notification of Environment Southland.

27. **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.*

Please see Effluent Management Plan attached to this application, mitigations include:

Buffers in place between waterways and effluent discharge area
Low rate irrigation system
Irrigation only when soil and climatic conditions are appropriate
Emergency plan in place
Sufficient storage
Regular checks of infrastructure

My maintenance for my effluent system includes:

Weekly checks include:

-clean sumps, check pond and float switches are clear and operational, check pond level, check pipes and effluent lines, check pond odour levels
-check ponds and pod pipe connections, check failsafe operation

Monthly checks include:

Check solid levels and clean if required
clean effluent pipe connections
check all hydrants

Annual checks include:

service pump, clean pipes and irrigation plines, check weeping wap slates, desludge pond if required. Check pod pressure and application rate.

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:

As above and as described in attached effluent management plan.

I monitor my effluent discharge by:

Regular checks

Record details of effluent disposal duration and keep records for future reference

Section F: Other matters

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

10 years

Please say why you think this consent duration is appropriate for your operation:
In line with recently released national regulations for dairy support operations

29. 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.

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

Yes No

If **yes**, please indicate below

- (a) Neighbours Suitable buffer proposed to neighbouring dwellings and property boundary
- (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) Victoria Jones (acting on behalf of Capil Grove Clients)

Signed 

Date 27/04/2022

END OF FORM