# 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

Consent number

(a)

- 1. Please provide details of your existing resource consent to discharge agricultural effluent:
  - (b) Expiry date 25 June 2026 (Previous consent on farm)

AUTH-20211143-02

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:	444 Springhills -Tussock Creek Road, Springhills
Map reference:	1249823E 4872356N
Legal description	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

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

	Effluer	nt Disposal Area Details		
Soils	Soil Vulnerability Factors			
	Туре	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 B – I Category C – S Category D – N	Artificial Drainage or coarse mpeded drainage or low in Gloping land (over 7 degrees Well drained flat land Other well drained but very	filtration s) stony flat land	
Physiographic	Zone	Contaminant pathway(s)	for Physiographic zon	e
zone (s)	Gleyed	Artificial drainage	e, overland flow	
	Bedrock/Hill Co	<sup>ntry</sup> Deep drainage, c	overland flow, artificial o	drainage
	Post Wotlands	Deen dreinere	lateral drainage and ar	

Peat Wetlands Deep drainage, lateral drainage and artificial drainage

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

Yes No (Go to question 6)

(Go to question 7)

Buffers will be inplace 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)

#### 7. Are there are any bores or soakholes within 20 metres of the discharge area?



#### 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?

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

Yes	No
	>
	$\checkmark$
	$\checkmark$
	$\checkmark$

Yes	No
	$\checkmark$
	<
	<
	$\checkmark$

#### 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?	640	
	(b)	How many times per day will you milk (maximum)?	once/twice/three tim	nes 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.	Wint	ter 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 tim	nes per day
	(d)	Dates of winter milking season	1/06 - 31/8 (pro	ovide dates)

#### Please see AEE and Farm Environment Plan

### 12. Feed pad/wintering pad/stand-off pads(a) Number of cows on feed/wintering/stand-off pad

(a)	Number of cows on feed/wintering/stand-off pad	84	40 cows
(b)	What is the size of the area?	8,240	square metres
(c)	Is the feed/wintering/stand-off pad roofed?	Yes	Yes/No
(d)	Is rainwater diversion in place?	Yes	Yes/No
(e)	Is it mechanically swept?	Yes	Yes/No
(f)	If it is washed down, amount of water used	-	litres/day
(g)	How is effluent from this facility disposed of?	To storage, th	en applied to land
(h)	Intended length of time the area is to be used	approx 15	2 days per year

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 attahed DESC for volume of effluent and storage requirements

#### Effluent irrigation rate and method

Please see AEE for detailed information

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*	See AEE		5 - 10	mm/hr
Proposed effluent application depth		5 - 25	mm per ap	plication

\*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.



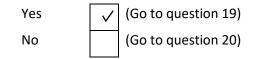
If yes, then please include the results of the test.

#### Section D: Storage facility

**17.** What volume of effluent storage and treatment do you have on site (m<sup>3</sup>)? Please include a Dairy Effluent Storage Calculation to show that you have, or will have sufficient effluent storage.

Effluent Pond/Tank	17,800	Cubic metres
Sump(s)		Cubic metres
Weeping wall/sludge bed	288m3 and 264 m3 weeping wall	s and sludge bed Cubic metres
Other (please specify)		Cubic metres

#### 18. Are you increasing storage on site?



*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?



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 No Existing ponds have drop test completed and are certified by a Chartered Professional Engineer

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)?

No 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

#### 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?



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.

N/A

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.* 

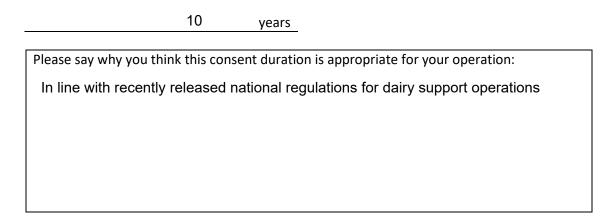
Storage capacity is sufficient to delay irrigation untill conditions are favourable and emergency irrigation plan is in place, which includes notification of Environment Southland.

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.

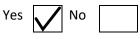
Please see Effluent Management Plan attached to this application, mitigations include:
Buffers inplace between waterways and effluent discharge area Low rate irrigation system Irrigation only when soil and climatic conditions are appropriate Emergency plan in place Sufficient storage Regular checks of 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 poods 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, deslude pond if required. Check pod pressure and applciation 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:
egular 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:

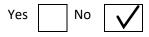


#### 29. Do you have a current collected agricultural effluent management plan?



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?



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	(Ha-
Date	27/04/2022

END OF FORM