Farm Dairy Effluent Application for



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1.0 Overview

This section should provide an overview of the property, the proposal and the receiving environment. It should briefly cover the location of the farm, soils, physiographic zones and the effluent system as well as include a map of the farm (topo or aerial) showing its location.

Matters to include are:

- where the farm is;
- summary of soil types, physiographics and drainage characteristics;
- > outline of the farm and any proposed changes to the effluent system;
- what consents are being sought and why.

Property Details	
Catchment	
Total Farm Area (ha)	
Replacement Consents?	
Change in scale/intensity?	
Physiographic zone(s)	
Freshwater Management Unit	

Soils	Coil	Vulnerability Factors		
	Soil Type	Structural Compaction	Nutrient leaching	Waterlogging
5051 11 16 11				
FDE land classification				
Characteristic(s) of FDE classification				
Groundwater nitrate levels				
Physiographic zone (s)	Zone	Contaminant zone	pathway(s) fo	r Physiographic

2.0 Consents Required

This section should outline the consents required under the relevant Regional Plans (including the proposed Water and Land Plan – decision version).

Plans to look at are:

- Regional Water Plan (2010)
- Proposed Water and Land Plan (Decision version)
- Regional Effluent Land Application Plan

3.0 Statutory Considerations

All applications will require an assessment of the proposal against relevant statutory documents. The depth of discussion and documents that need to be considered should be <u>relevant</u> to the type and scale of your proposal.

It may help to group the objectives and policies according to topic such as 'water quality', 'water quantity' and 'soils' etc.

For the proposed plan please discuss the physiographic zone policies that relate to the farm and how the application of effluent will meet these.

If you would like a specific consent term please discuss why this is appropriate in regards to the matters outlined in the relevant policies of the regional plans.

4.0 Notification

Public notification is largely at the Councils discretion but there are a number of situations where public and limited notification is required to be carried out under the RMA. A brief discussion should be made on whether or not public or limited notification of the application is appropriate. See Sections 95-95G of the RMA.

5.0 Receiving Environment

This section provides an assessment of the receiving environment in which the proposal will take place. In order to make an assessment of a proposals effect on the environment we need to know the historic and current state of the receiving environment (i.e. groundwater) and the key contaminant transportation pathways.

Information for this section can be found from a number of sources, including Environment Southland's website and Land and Water Aotearoa.

5.1 Soils

5.2 Water

This sub-section should include:

- a description of any waterways within the site;
- ground and or surface water quality;
- what catchment the site is located in and where the catchment drains to;
- a discussion about the general state and trend of water quality in the catchment the site is in;
- any site specific monitoring of water quality; and
- the groundwater zone/surface water body from which water will be taken.

5.3 Physiographics

Discuss the physiographic zones on the farm and the key transportation pathways and water quality implications for each zone.

5.4 Topography

Slope

6.0 Proposal Details

Provide a detailed description of the activities being carried out under each of the consents being applied for. This Section and Section 5.0 form the basis of assessing the effects of the proposals on the environment in Section 7.0.

6.1 Effluent

This sub-section should include:

- an outline of the effluent system including where effluent is generated, how it is treated and stored and then discharged to land;
- proposed buffer distances from surface water, bores, property boundaries and neighbouring houses;'
- proposed changes and upgrades;
- application rates and depths and why appropriate for the site;
- where effluent will be discharged; and
- contingency measures in case of bad weather or mechanical issues.

6.2 Effluent Storage

Note:

New requirements under the Proposed Water and Land Plan(decision version 2018) mean that for your <u>new effluent storage</u> to be processed as a controlled activity (Council must grant consent) it must:

- •be constructed within the normal operating parameters of a leak detection system, or the pond drop test criteria in Appendix P; and
- Have a design that is certified by a Chartered Professional Engineer (refer to IPenz Practice Note 21 or 27); and
- •include an operational management plan that includes how the pond will be operated, when drop tests will be undertaken and the installation of monitoring devices (viewing ports).;and
- •No part of the facility is within certain setbacks from waterways and water abstraction points. It also can't be located over any known tile drains.

An application that does not meet one or more of the above criteria will be processed as either a discretionary or non-complying activity.

If you intend to <u>use your existing effluent storage</u> Rule 32D in the proposed Southland Water and Land Plan covers this. Take a look at the flow chart and factsheet on our website to see if you require a resource consent for the use and maintenance of your effluent storage facility. Even if you don't need a consent will need to tell us as part of this application how the use of your existing effluent pond is permitted, which is through a drop test from a suitably qualified person.

This sub-section should include:

- the age of the pond and the material the pond is constructed of;
- how the system will be maintained and operated;
- how much storage will be installed, by when and by who;

- has the effluent storage undergone a pond drop test in accordance with appendix P
- > a Massey Pond Effluent Calculation.

6.3 Water Take

This sub-section should include:

- where the water will be taken from (bores and their location or the surface waterway);
- how much water will be taken (litres per second, per day and per year);
- any water storage.

7.0 Assessment of Environmental Effects/Mitigations

Discuss how the proposals will impact on the environment and what will be done to mitigate any adverse effects. This section should refer back to the description of the environment, especially the water quality results and physiographic zones.

7.1 Effluent

The key questions here are what are the effects of the discharge of effluent to land and the wider receiving environment which includes water, land and also any odour effects. This section should also include a discussion of what mitigation measures and good management practices will be used to address these effects/risks. Sub-headings which could be used in this section are:

- Odour
- Surface Water
- Groundwater
- Soil health
- Effluent Pond and Infrastructure

7.2 Water Take

The key questions here are what is the effect of the abstraction on water availability, other water users and the source of the water? The assessment should address these questions.

8.0 Consultation

Outline any consultation that has been carried out or the reasons why no consultation has been undertaken.

9.0 Conclusions

Appendix 1: Effluent Management Plan (EMP)

This should be a plan on the operation of the effluent system, the decision making processes around when and where effluent is applied and how the system is maintained.

Appendix 2: Effluent System Overview

This should be a diagram of the effluent system with photos showing the key infrastructure, pipes, sumps, etc.

Appendix 3: Pond Calculation Summary Report

Appendix 4: Soil Map

Appendix 5: Effluent Storage Pond Details

• Including an operation management plan

Appendix 6: Effluent Infrastructure Photos

Include photos and an assessment of structural soundness of current structures on farm that convey effluent, i.e. larger sumps, stone traps, etc. This is a basic assessment to ensure these structures are not cracked and there are no obvious signs of leakage.

Appendix 7: Subsurface Drain Map

Appendix 8: Effluent Area Map