

Previous Consent No. _____
 Charge No. _____
 NAV No. _____
 Application No. _____

**Form ‘B’ – Assessments of Environmental Effects
 Application to Discharge Dairy Effluent to Land
 and to Discharge Odour and Airborne
 Contaminants to Air**

Applicant Name : _____ (from form A, Q1.4)

1. Details of the Changes of Conditions Requested
 or N/A New consent (move to Q 2)

1.1 What is the number of the consent you wish to change?

1.2 Attach a copy of the consent, with annotations showing the changes you are requesting, or state specifically the changes you wish to make below.

Condition #	Change requested
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Now go through the form and confirm, the details of your discharge, as some will change as a result of the change.

DETAILS OF THE ACTIVITY

2. Location of the Activity

Street Address of the Milking Shed, Effluent Storage Pond and Farm Dairy Effluent (FDE) Irrigation Area

2.1 Legal Descriptions(s)

Milking Shed _____
Storage Pond _____
Any Water Take(s) _____
FDE Irrigation Area(s) _____

2.2 Documents to Include in Application

A Site Plan

Please attach a detailed plan (on an aerial map if possible) showing the general layout of your operation. Include on the map, locations of the:

- Milking shed and yard,
- Feedpad (if applicable),
- Storage pond,
- Cross hatched shading of the total primary and secondary (emergency) farm dairy effluent discharge area (in the paddock) including each areas total size in hectares.
- Buffer zones (unsafe areas where effluent will not be applied) from:
 - Property boundary's,
 - Public roads,
 - Wells,
 - Surface water bodies (flowing or not),
 - Off-site dwellings (residential houses).
- Point of take for water to supply the milking shed,
- Surface water bodies, wells/bores, public water supplies,
- Any other area of interest.

B Storage Pond Calculation Summary Report

All new applications (including replacement consents which do not currently have an effluent storage pond or were not previously required to have the pond storage calculated by Massey University / Horizons Regional Council Pond Storage Calculator) are required to use the Massey University / Horizons Regional Council Pond Storage Calculator to determine the minimum pond size. Your DairyNZ or Fonterra representatives are able to run this calculator for you.

Note: The pond size determined by the Pond Storage Calculator is to be designed for the maximum rainfall event.

C Overseer® Nutrient Budget

If your herd size is greater than 100 animals, you are required to provide a predictive (e.g. for the upcoming milking season) Overseer® Nutrient Budget prepared by an approved provider. Please also provide the electronic "OVP" files to the Consent Advisor via email consentadvisor@hbrc.govt.nz at time of application.

- 2.3 **Is there a feedpad?** Yes No
 If yes, is the feedpad covered? Yes No

2.4 **Are there clean stormwater diversions from any of the impervious areas?**

- Yes No

If yes, where are the clean stormwater diversions, when do they operate and where do they discharge to?

2.5 **What is the total area that captures farm dairy effluent for later application to land?**

- Milking Shed: _____ m²
 Yard: _____ m²
 Feed-pad _____ m²
 Any other areas _____ m²
 Total surface area capturing dairy effluent _____ m²

2.6 **Where is the milk discharged to if it cannot be picked up?**

2.7 **Farm Dairy Effluent Production**

Maximum number of animals being milked each month

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec

Number of milking days per year _____

What is the milking frequency? E.g. twice a day? Three times over two days? _____

What is the maximum volume of liquid farm dairy effluent generated? (m^3 /month, based on maximum number of animals milked per month)

Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec

2.8 Describe the nature of the effluent discharge; including:

The percentage of solids in the effluent: _____%

Details of the contaminants (a laboratory analysis of the Total Nitrogen concentration of a representative sample of the discharged effluent is necessary for existing discharges)

Will solid effluent be separated from the liquid effluent prior to entering the pond?

Yes No

If yes:

What is the method of separation? _____

How will the solid effluent be stored? _____

How will the solid effluent be discharged? _____

2.9 How will the yard and/or feed-pad be cleaned?

Using wash water

If wash water is used, will this be recycled green water? Yes No

Dry scraped

2.10 Describe any other methods for capturing farm dairy effluent:

2.11 Indicate whether the following collection areas are part of your effluent management system.

Stone Trap

Sump Volume _____m³

2.12 Storage Pond

What is the minimum volume of the effluent storage system?

As determined by the Horizons Regional Council Pond Storage Calculator

Pond(s) _____m³

Describe how the farm dairy effluent in the pond will be managed (i.e. aeration, monitoring)

2.13 Water Sources

Is the farm dairy effluent application area located over an Unconfined Aquifer?:

Yes

No

What is the depth to the groundwater table at its highest level

_____ metres below ground

tick box if water level rises to/above ground during wet conditions

How has this been determined _____

2.14 Nutrient Management

Will fertilisers be used on the effluent application areas? Yes No

What is the total amount of nutrients to be applied to the effluent application area? *Both effluent and fertiliser combined.*

Nitrogen _____ kilograms per hectare per year

Phosphorus _____ kilograms per hectare per year

What are the predicted Nitrogen and Phosphorus losses to the environment? *Derived from the Overseer® Nutrient Budget*

Nitrogen _____ kilograms per hectare per year

Phosphorus _____ kilograms per hectare per year

What is the minimum land area for effluent application, required to achieve a Nitrogen application of 150 kg/ha/yr? _____ Hectares

What is the minimum land area for effluent and fertiliser application, required to achieve a Nitrogen application of 150 kg/ha/yr? _____ Hectares

2.15 Effluent Application to Land

Area of Discharge

Is the proposed effluent discharge area:

An existing farm dairy effluent discharge area?

A new area that has not been used for the discharge of farm dairy effluent before?

If yes, what is the current land use? _____

What is the proposed land area for effluent application?

High risk _____ hectares

Low risk _____ hectares

2.16 Effluent Irrigator Details

Method of spreading liquid effluent (**please tick applicable**)

Pivot irrigator Travelling irrigator

Gun irrigator K-Line (pod)

Muck spreader Removed by contractor

Other (please specify) _____

Is the irrigator: Fixed Rate Application Variable Rate Application

If fixed rate, what is the application rate of the irrigator? _____ mm/hour

If variable rate, what is the maximum application rate of the irrigator? _____ mm/hour

If variable rate, what is the minimum application rate of the irrigator? _____ mm/hour

Is any effluent applied via fertigation? Yes No

If yes, please confirm whether or not back flow prevention is installed: Yes No

2.17 Effluent Irrigation Details

What is the proposed maximum application depth? _____ mm

What is the proposed maximum application rate? _____ mm/hour

What is the proposed minimum interval rate between applications? _____ days

How have the figures above been determined?

Will soil moisture be monitored? Yes No

If yes, how? _____

How will suitability for irrigation be determined?

How will solids that are removed from the farm dairy effluent pond i.e sludge, be disposed of?

Does your irrigator/pumping system have an alarm or de-activation device in the event of pipe breakage or if the irrigator stops? Yes No

If yes, what? _____

What emergency provisions do you have for the discharge of effluent should your primary irrigation system fail? **e.g gravity fed storage volume.**

3. ASSESSMENT OF ENVIRONMENTAL EFFECTS

3.1 Effects on Surface Water

Objectives 27 and 40 of the Regional Policy Statement and Policy 71, 72A and 76A of the Regional Resource Management Plan talk about the quality of surface water bodies and how this must be maintained to ensure they are suitable for sustaining or improving aquatic ecosystems. Additionally, Policy 48 of the Regional Policy Statement sets out guidance around buffer distances to ensure that surface water bodies will be protected from adverse effects from discharges. Please answer the following questions, showing how your proposed discharge will comply with these policies and objectives and will not adversely impact surface water bodies.

Comment on the adverse effect the discharge may have on surface water.

How will adverse effects on surface water be mitigated?

3.2 Effects on Groundwater

Policies 17, 19 and 20 talk about the management of activities which may affect groundwater. Please answer the following questions, showing how you intend to manage your discharge in a way that will not adversely impact groundwater.

Comment on the adverse effect the discharge may have on groundwater

How will adverse effects on groundwater be mitigated?

3.3 Effects on Soils

Objective 38 and Policy 67 of the Regional Resource Management Plan talk about the sustainable management of the land resource so as to avoid compromising future use and water quality. This also sets out environmental guidelines for use of the land covering issues including appropriate land use, soil health and soil contamination. Please answer the questions below whilst considering how your activity will be undertaken in a way that will meet these objectives and policies.

Comment on the adverse effect the discharge may have on soils

How will adverse effects on soils be mitigated?

3.4 Effects on Residents or Users of the Area

Policy 8 and 69 and Objective 39 of the Regional Policy Statement talk about discharges of odour to air. These policies and objectives seek to maintain a standard of ambient and local air quality that is not detrimental to human health, amenity values or the life supporting capacity of air and sets out environmental guidelines in relation to this air quality. Please answer the following questions, showing how your activity will be managed so it is not contrary to these policies and objectives.

Comment on the adverse effects the discharge of odour and other airborne contaminants may have on nearby residents or users of the area.

How will adverse effects on nearby residents and users of the area be mitigated?

What alternative methods for discharging the effluent were considered?

Detail why the method of application is the best practicable option.

Please detail any other best management practices you propose to follow when managing your dairy effluent.

Please note any other information that may assist the Council in processing your application.

4. CONSULTATION / AFFECTED PARTIES

4.1 Please list the persons that you believe to have an interest in or that may be affected by the proposal.

Name	Address	Postcode	Phone
<hr/>			
<hr/>			
<hr/>			
<hr/>			
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4.2 Detail the consultation undertaken with any interested/affected parties, and the views of those consulted. Attach correspondence if appropriate.

The consultation undertaken and the information provided is to aid the Council in determining who may be adversely affected by the proposal.

Please note: Council may determine that your application can be processed without notification. This may be the case if either there are no affected parties or written approval from all those people who may be adversely affected is obtained. Council will determine which parties (if any) are considered to be affected and will provide you with a list of who those people are. You will then be required to obtain their unconditional approval in accordance with Section 95 of the Resource Management Act (1991).

5. GENERAL INFORMATION

What consents are required from other authorities for the proposed activity?

None

Consent Required	Authority	Applied for?
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>
_____	_____	Yes <input type="checkbox"/> No <input type="checkbox"/>

Please list all documentation (in addition to this form) that makes up your application. Please ensure that all documentation listed is included with your application when it is submitted.

Site Plans Date

Storage Pond Calculation Summary Report Date

Overseer® Nutrient Budget Date

Other Documentation (e.g. letters, correspondence from affected parties, additional material)

Title	Preparation Date
_____	_____
_____	_____

Please remember it is mandatory to include the following Included

- An accurate site plan
- A certificate of title
- Your deposit
- A copy of the Storage Pond Calculation Summary Report
- A copy of the Nutrient Budget for the property
- Administration Form A