# Permitted activity registration Discharge of farm dairy wastewater to land



#### Notes

The spreading or irrigation to pasture of your farm dairy effluent will not require a resource consent if you can comply with all the conditions of Permitted Activity Rule 3.5.5.1 at all times.

This form will help you determine whether you can comply with the rule, and enable you to notify us that you wish to have your farm dairy effluent discharge registered as a 'permitted activity'. The Waikato Regional Council holds records of permitted farm dairy discharges for monitoring purposes.

- Make sure you fully complete this form and answer all the questions. Include all the information requested, with as much detail as possible.
- Fully complete any required fields.
- Sign and date this form and return it to the Waikato Regional Council.

Please make sure you read the information section at the end of this form. If you need any further help, please phone our Resource Use staff on **0800 800 402**.

### **Applicant's details** We will send you a letter confirming your registration as a permitted activity. Full name and address of activity operator (our records will be held under this name) Name(s) or company name: \_\_\_\_ Contact person:\_\_\_ \_\_\_\_\_ Best contact time:\_\_\_ Postal address:\_ Daytime phone number(s):\_\_\_\_ Fax: Email address:\_\_ **Sharemilker/farm manager** (if applicable) Company name:\_\_\_\_\_ Best contact time: Contact person:\_\_\_ Postal address:\_\_\_ Daytime phone number(s):\_\_\_\_\_ \_\_ Fax:\_\_\_ Email address:\_

	2 Location
	Where will the activity occur?
	Farm dairy supply number
	Legal description of property
	Physical/road address
	Name of closest road/street
	Nearest settlement/town
	Map coordinates of activity (such as Easting/Northing or NZMS260 grid references)
	Provide a detailed location plan or map (preferably to scale) that helps us see what or who may be affected by your proposal and will enable the site to be located for inspection purposes. You must show:  • property boundaries
	neighbouring properties (identify the property owners' names)
	<ul> <li>the nearest road or state highway</li> <li>location of dairy shed buildings, stand off areas or feed pads, sumps, sand/gravel traps, ponds or ditches</li> </ul>
	areas where effluent is irrigated or spread.
	<b>Note:</b> The Waikato Regional Council can help you create a base map to assist with your location plan. Please call us on 0800 800 402 during office hours for assistance.
	3 Wastewater management system
	Maximum number of cows milked/to be milked
	Area of land used for effluent or sludge application
7	Provide details of wastewater management system
	<ul><li>○ Travelling irrigator</li><li>○ Holding ponds (with no outlet pipe)</li><li>○ Other</li></ul>
	4 Final checklist
	Have you? Please tick
	Read Permitted Activity Rule 3.5.5.1 (overleaf) and clearly understood what is required of you?
	Provided all the required information, contact details and included a sketch or location map that shows us exactly
	where your activity will take place?
	If necessary, advised the Waikato Regional Council that you wish to surrender (cancel) any associated consent for discharge of farm dairy wastewater to water?
	5 Declaration
	I/we hereby certify that, to the best of my knowledge and belief, the information provided is true and correct.
	I/we also understand that I/we must continue to comply with the Waikato Regional Council's permitted activity conditions.
	Failure to do so may result in enforcement action or a resource consent may be required.
	Signature of activity operator* Date
	* or person authorised to sign on behalf (please indicate authority)

#### **Conditions of Permitted Activity Rule 3.5.5.1**

## Read these conditions carefully and make sure you understand what is required of you. You should detach this page and keep it for future reference.

- a) No discharge of effluent to water shall occur from any effluent holding facilities.
- b) Storage facilities and associated facilities shall be installed to ensure compliance with condition a).
- c) All effluent treatment or storage facilities (e.g. sumps or ponds) shall be sealed so as to restrict seepage of effluent. The permeability of the sealing layer shall not exceed 1x10-9 metres per second.
- d) The total effluent loading shall not exceed the limit as specified in Table 3-8, including any loading made under Rules 3.5.5.2 and 3.5.5.3, 3.5.6.2, 3.5.6.3 or 3.5.6.4.
- e) The maximum loading rate of effluent onto any part of the irrigated land shall not exceed 25 millimetres depth per application.
- f) Effluent shall not enter surface water by way of overland flow, or pond on the land surface following the application.
- g) Any discharge of contaminants into air arising from this activity shall comply with permitted activity conditions in Section 6.1.8 of this Plan.
- h) The discharger shall provide information to show how the requirements of conditions a) to g) are being met, if requested by the Waikato Regional Council.
- i) The discharge must not occur within 20 metres of a Significant Geothermal Feature.
- j) Where fertiliser is applied onto the same land on which farm animal effluent has been disposed of in the preceding 12 months, the application must be in accordance with Rule 3.9.4.11.

#### **Achieving compliance**

#### **Avoid overflow**

- There must be no capacity for the effluent to discharge to any drain, stream, river or lake on your property, either directly of by soakage.
- You must maintain a minimum freeboard level of at least 400 millimetres.
- You must have sufficient storage room to allow for prolonged periods when you can't irrigate or spread to pasture, such as wet weather or system breakdown.
- Your effluent treatment and storage facilities should be constructed in accordance with the publication 'Dairying and the Environment Managing Farm Dairy Effluent' (1996) by the Dairying and the Environment Committee. Copies of this guideline are available from the New Zealand Dairy Research Institute, Private Bag 11029, Palmerston North.

#### **Holding facilities**

- · Your effluent must be contained at times. It must not be able to drain away, either into the ground or by overflow.
- · Your storage facilities must be sealed with clay, concrete or some other recognised sealing compound.
- Your holding ponds should have the base and sides thoroughly compacted with a wheeled machine. If the soil has less than 8 per cent clay additional sealing measures may be required, such as an artificial liner.

#### Nitrogen loading

- · The maximum nitrogen loading rate for grazed pasture is 150 kilograms of nitrogen per hectare per year.
- Using some average values, 150 kg/N/ha/yr can be converted into a minimum irrigation area and a maximum depth of effluent that can be applied each year:
  - The amount of nitrogen excreted by the cow averages about 20 grams per cow per day.
  - The volume of nitrogen excreted by the cow averages a volume of 50 litres per cow per day.
  - The average lactation period is about 270 days.
  - This equates to a land area requirement of 360 square metres per cow (about one hectare per 27 cows), and
  - an annual effluent loading rate of 75 millimetres per year.

#### Nitrogen loading rate calculations for grazed pasture

Total N/cow/year	=	20 g/cow/day x 270
	=	5.4 kg
Nitrogen loading rate	=	150 kg N/ha/year
Land area required/cow	=	5.4/150
	=	0.036 ha
	=	360 m <sup>2</sup>
Nitrogen loading rate	=	150 kg N/ha/year
land area required/ 100 cows	=	5.4 100/150
	=	3.6 ha

#### **Protect local water resources**

- The maximum effluent loading rate is 25 millimetres depth per application. Generally, ponding should not occur if this is complied with and the instantaneous application rates (per second) are appropriate to conditions
- Don't irrigate or spread effluent:
  - on or near flowing drains or waterbodies
  - · when it is raining heavily or stormwater is flowing off your land
  - onto areas where the soil has clogged or sealed.

#### Manage air discharges

- Site and manage your system in a way that it prevents odour and spray drift nuisances.
- Don't irrigate or spread effluent near dwellings, boundaries or neighbours' houses.
- · Limit upward spraying from irrigators.
- You must also comply with any separation distance required by your local district council.

#### **Fertiliser application**

- Fertiliser must be applied in manner that ensures there is objectionable odour or drift outside of your property boundary or avoidable discharge into any waterbody.
- Fertiliser must be applied in accordance with the NZ Fertiliser Manufacturers' Research Association, 1998 (updated 2002): Code of Practice for Fertiliser Use.
- If applied on the same land used for effluent application, within 12 months of effluent application, you must have a nutrient management plan in place. This plan must record the following information for nitrogen (N) and phosphate (P) (in units of kg of N and P per hectare per year):
  - · inputs from fertiliser
  - inputs from other sources such as manures, green crops and soil mineralisation
  - outputs in product
  - results of soil testing for levels of available N and P.
  - practices that will be implemented to reduce nutrient and sediment losses from the property and to avoid, remedy or mitigate adverse effects on the environment.

#### **Privacy Statement**

Waikato Regional Council requires this information to process the registration of a permitted activity for the discharge of farm dairy wastewater to land and assist in managing the region's natural and physical resources. Information in this permitted activity registration form is regarded as official information and will be used by council for monitoring purposes.

Council will hold this information, including all associated attachments, and it is subject to the Local Government Official Information and Meetings Act 1987 and the Privacy Act 2020. The details may also be made available to the public.

Under the Privacy Act 2020 you have the right of access to, and correction of, personal information held by the Waikato Regional Council.

