Animal waste systems

The collection, storage and spreading of animal waste, most commonly dairy effluent, provides valuable nutrients that can be cycled back onto farmed land. However, if this is not managed appropriately, it can have negative effects, particularly on water quality.

In most cases, dairy farm animal waste systems will include:

- A process through which (diluted) animal waste from the milking shed, yards, feed pads and associated areas is collected, separated and directed to a storage facility.
- A method to direct or transport waste to a storage facility.
- A storage facility (such as an effluent pond) as well as ancillary structures such as sumps, stone traps, weeping walls.
- The discharge of animal waste to land, usually through irrigation.

As part of the Water Quality Plan Change (Proposed Plan Change 8), ORC is proposing several new policies and rules in the Water Plan to manage these systems.

The use of land for the waste system and storage, and the discharge of effluent to land, would be managed under two separate frameworks (detailed overleaf):

- Use of land for animal waste systems
- Discharge of animal waste

You may need a resource consent for an existing storage facility. You will always need a resource consent to build a new one or to discharge effluent.

The requirement to apply for resource consents for storage and discharge would be staged over several years because we recognise there can be significant costs to upgrade or replace animal waste systems. See the Timeframe for resource consents for storage and discharge diagram on page 5.

FAQs

Q. Does animal waste include effluent from my dairy shed?
A. Yes.

Q. Does the animal waste rule include waste from animals standing in the paddocks, which isn’t collected through the animal waste system?
A. No

Q. Does animal waste include sludges from other parts of my farm, for example wintering barns, stand-off pads and feed pads?
A. Yes. Animal waste includes any waste material containing animal urine or faeces.

Definitions

Animal waste: Faeces or urine from any animal; effluent.

Animal waste systems: The collection, conveyance, storage, treatment, disposal or application of liquid or solid animal waste.

Pond Drop Test: This determines how well an effluent storage pond or tank is sealed.

Dairy Effluent Storage Calculator (DESC): The DESC is a calculator that determines the minimum volume of effluent storage required, and takes into consideration soil types, climate data and current or proposed on-farm effluent management. It is available at www.dairynz.co.nz

A suitably qualified person: A person who has been assessed and approved by ORC as being appropriately qualified, experienced and competent in the relevant field of expertise.

Regionally Significant Wetland: Any wetland that is:

- Listed in Schedule 9 and shown on maps F1-F63 of the Water Plan, or
- Within a wetland management area listed in Schedule 9 and mapped in maps F1-F63 of the Water Plan, or
- Higher than 800 metres above sea level.
Use of land for animal waste systems

Animal waste systems need to be well designed and maintained so they don't leak. They also need to have sufficient storage capacity for when conditions are not favourable for spreading the effluent, for example when the soil is too wet to absorb effluent.

Under the proposed Water Plan rules, you would need to know the following information about your animal waste system:

**How many animals generate effluent and how often?**
For example: how big is the milking herd? How often are they milked? How long is the season?

**Type of storage facility**
Where the effluent is generated and how it's directed to storage (e.g. by a stone trap, sump, weeping wall)

Storage could be a pond (synthetically lined, concrete or clay) or an above-ground tank

**Size of the storage facility**
Actual volume of the existing storage and the minimum volume required

(Using the Dairy Effluent Storage Calculator)

**Structural soundness of the storage pond**
Determined by regular visual inspections of a suitably qualified person

**Leakiness of the storage**
Determined using a pond drop test by a suitably qualified person

**Farm management plan**
Is a management plan being used to track inspections and pond drop testing?
Are contingency measures outlined to avoid the discharge of effluent to water throughout the system?

Do you need a resource consent?

Use Figure 1 to determine whether your animal waste system would be likely to require consent.

In general:
- A well designed and maintained pond that was constructed prior to 31 March 2020 would not need consent.
- A well designed, located and maintained pond that is constructed after 31 March 2020 would require consent as a controlled activity.
- A poorly designed, located or maintained pond would require consent as a discretionary activity.

If you think you require consent, talk to the ORC Consents Team to confirm what your application needs to include.

There’s more information about the resource consent process at [orc.govt.nz/consents](http://orc.govt.nz/consents). Contact the our Consents Team to discuss your resource consent application on 0800 474 082 or customerservices@orc.govt.nz.
Figure 1: Use of land for animal waste systems - do you need resource consent?

Yes

Was the animal waste system built before 6 July 2020?

No

Is the pond sized in accordance with the DESC?

Yes

The pond is:
- Synthetically lined with leak detection OR
- Impervious concrete OR
- Above ground tank OR
- Passed visual inspection and pond drop test

No

Was the animal waste system built after 6 July 2020?

Yes

The pond is:
- Synthetically lined with leak detection OR
- Impervious concrete OR
- Above ground tank

No

Yes

The pond is:
- Synthetically lined with leak detection OR
- Impervious concrete OR
- Above ground tank OR
- Passed visual inspection and pond drop test

No

Yes

Has a management plan been prepared and implemented?

Yes

No consent required under Rule 14.7.1.1 (permitted activity)

No

Consent required under Rule 14.7.2.1 (controlled activity)

No

No consent required until the relevant date in Schedule 19 (Rule 14.7.1.2 (temporary permitted activity))

No

Consent required under Rule 14.7.3.1 (discretionary activity)
Spreading animal waste onto land provides valuable nutrients but it must be managed carefully to avoid negative effects on ground and surface water quality. Some discharges of animal waste would remain prohibited. All others would require a resource consent, however the date for applying for consent would depend on the animal waste system you have (see Timeframe for resource consents for storage and discharge). Until those dates were reached, discharges would be permitted.

The spreading of animal waste (effluent) would need to be managed to ensure there is no discharge:

- Within 50m of surface waterways and their beds, including:
  - lakes
  - rivers
  - Regionally Significant Wetlands
  - drains or water races that discharge to a lake, river, regionally significant wetland or the coastal marine area
- That results in ponding or overland flow to waterways
- That results in any of the following in a waterway, after reasonable mixing:
  - Conspicuous oil or grease film, scum or foam
  - Floating or suspended material
  - Change in water colour or clarity
  - Emission of an objectionable odour
  - Water being unsuitable for drinking by farm animals
  - Significant negative effects on aquatic life

Do you need a resource consent?

All discharges would eventually need a resource consent, but the requirement to apply for a consent would be staged over several years depending on the capacity of your existing animal waste system – those with better systems will have more time before they needed to apply. Discharges would be temporarily permitted until the dates are reached (see Figure 3).

Use the flow chart on the following page to determine if your animal waste system would be likely to require a consent, and therefore when your discharge will require consent. In general:

- Unless the use of land for your animal waste system is temporarily permitted under Rule 14.7.1.2 in the Water Plan, you would need to apply for a resource consent to discharge animal waste either at the same time as you apply for consent to build a new animal waste system or within six months of the proposed Water Quality Plan Changes (Plan Change 8) becoming operative.
- Under proposed the new Water Plan Rule 14.7.1.2, your animal waste system may be permitted, but only for a set period of time. At some point, your land use and discharge will both require consent at the same time.
- If you can’t meet one or more of the limits set out above, you won’t be able to discharge animal waste.

If you need a resource consent, we’d need to know:

- Where effluent is generated (e.g. dairy shed, wintering barn)
- What’s the size and location of the discharge or disposal area (e.g. name of property and separation distance from lakes, rivers, wetlands, bores, soak holes, water supplies and dwellings);
- How you discharge the effluent including the applicator you use, and the rate at which it discharges

More information about our resource consent process is available on our website at www.orc.govt.nz/consents
Note: If your land use and discharge activity is temporarily permitted under Rules 14.7.1.2 ad 12.C.1.4, you will need to determine how many days storage you currently have, as per Schedule 19 in order to see when you need to apply consent.

Figure 2: Animal waste discharges – do you need resource consent?

Does your discharge meet one or more of the conditions in Rule 12.C.0.4?

Yes

Your discharge is prohibited.

No

Is your animal waste system permitted under Rule 14.7.1.1?

Yes

Your discharge requires resource consent under Rule 12.C.2.5

No

Is your animal waste system temporarily permitted under Rule 14.7.1.2?

Yes

Your discharge is temporarily permitted until the relevant date in Schedule 19, then...

No

Does your animal waste system require resource consent under either Rule 14.7.2.1 or Rule 14.7.3.1?

Yes

No

No

Figure 3: Timeframe for resource consents for storage and discharges

Note: If your land use and discharge activity is temporarily permitted under Rules 14.7.1.2 ad 12.C.1.4, you will need to determine how many days storage you currently have, as per Schedule 19 in order to see when you need to apply consent.

0-10 days storage available

Apply for land use and discharge consent within 6 months of PC8 becoming operative

11-40 days storage available

Apply for land use and discharge consent within 2 years of PC8 becoming operative

41+ days storage available

Apply for land use and discharge consent within 3 years of PC8 becoming operative