

Timelines, Rules, and Definitions for Animal Effluent Systems

I need new storage, when do I need to get consent?

The date you need to apply for consent and the date your new storage needs to be in place do not have to be the same time.

I have storage, do I need to get consent?

If you have existing storage on site, the need to apply for consent is based on the number of days of storage you currently have.

To figure out how many storage days you have now, you need to use the calculation below.

Days of storage	Date by which consent needs to be applied for
0-10	4 June 2023
11-40	4 December 2024
41+	4 December 2025

Step 1. Daily effluent volume

This is specified in schedule 19a of the Regional Plan: Water.

The Daily Effluent volume (m³) = Number of cows milked times 50L per animal times the number of milkings per day.

The example below is for 500 cows milked twice a day.

Step 2. Days of storage

Number of cows milked	50L per animal	Number of milkings per day	The daily effluent volume
500	x .05	x 2	= 50m ³

There are three examples:

Example A:

A cuboid @ 15m wide x 20m long and 3m deep with no batter which would hold 900m³. E.g. width x length x depth.

Example B:

A rectangle with a batter is for a pond @ 20m wide x 20m long. It is 2m deep and has a 3:1 batter. It would hold 392m³ of dairy effluent ((width top + width bottom)/2) x (length top + length bottom)/2) x depth.

Example C:

A saucer is for a circular pond with a 15m radius and 2.5m deep that would hold 1423m³.

$$V = \pi r^2 \frac{h}{3}$$

Step 3. Calculate the days of storage

This is done by dividing the pond volume by the daily effluent volume.

Example A would have 18 days storage; **Example B** would have just under 8 days storage; and **Example C** would have just over 28 days storage.

Step 4. When do I need consent by?

The application dates depend on how many days storage there are as per the table below:

Days of storage	Date by which consent needs to be applied for
0-10	4 June 2023
11-40	4 December 2024
41+	4 December 2025

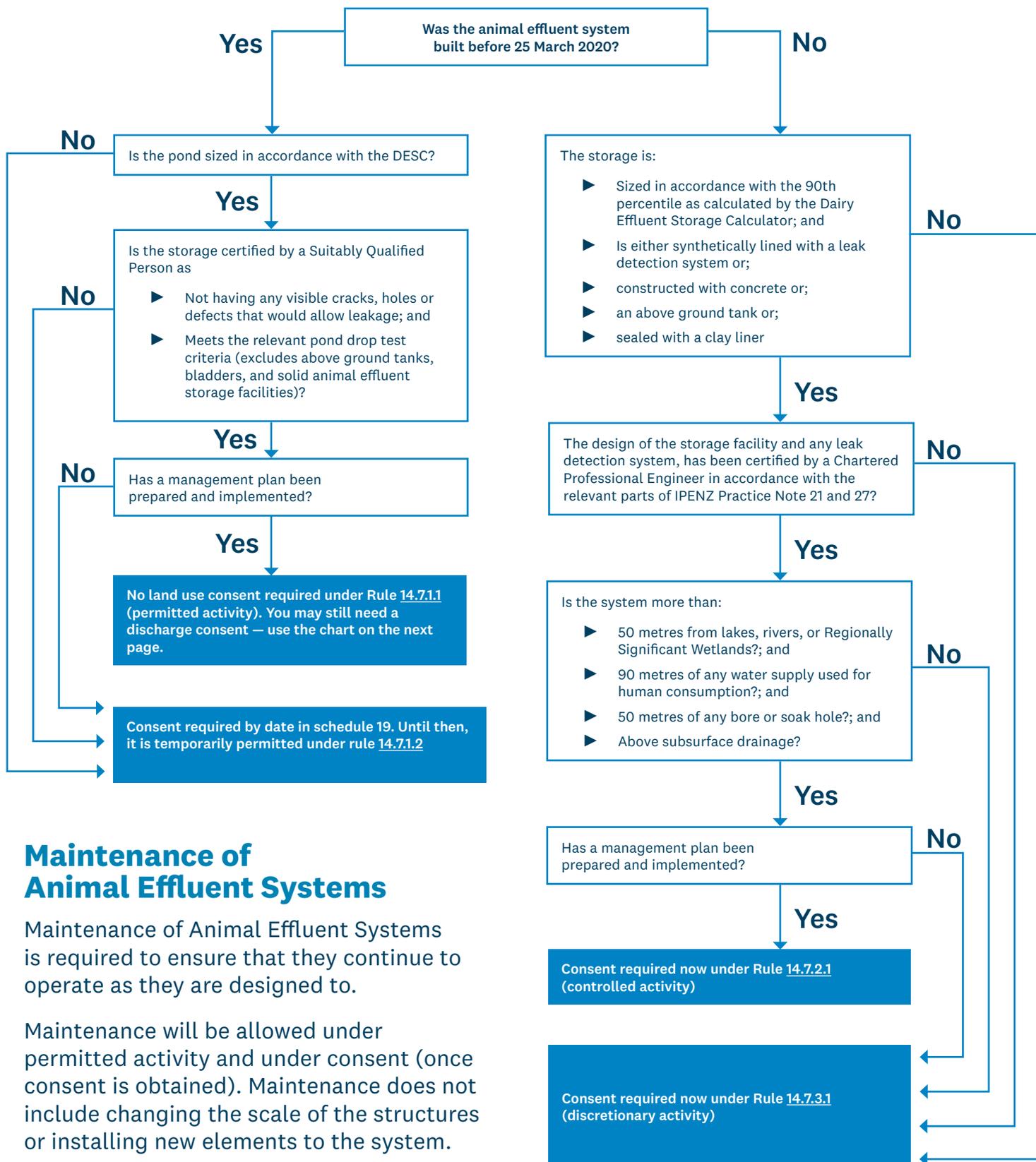
If you have existing storage on site, the need to apply for consent is based on the number of days of storage you currently have.

To figure out how many storage days you have now, you need to use the calculation below.

In **Example B**, the farmer would need a consent by <Insert Date + 1 year>, and the other two examples would require consent by <Insert Date + 30 months>.

Note: While the consent needs to be applied for by the specified dates, the infrastructure does not necessarily need to be completed by the same time. Consent may be granted to continue with the existing infrastructure until such time that works may be completed.

Use of land for animal effluent systems — do you need resource consent?

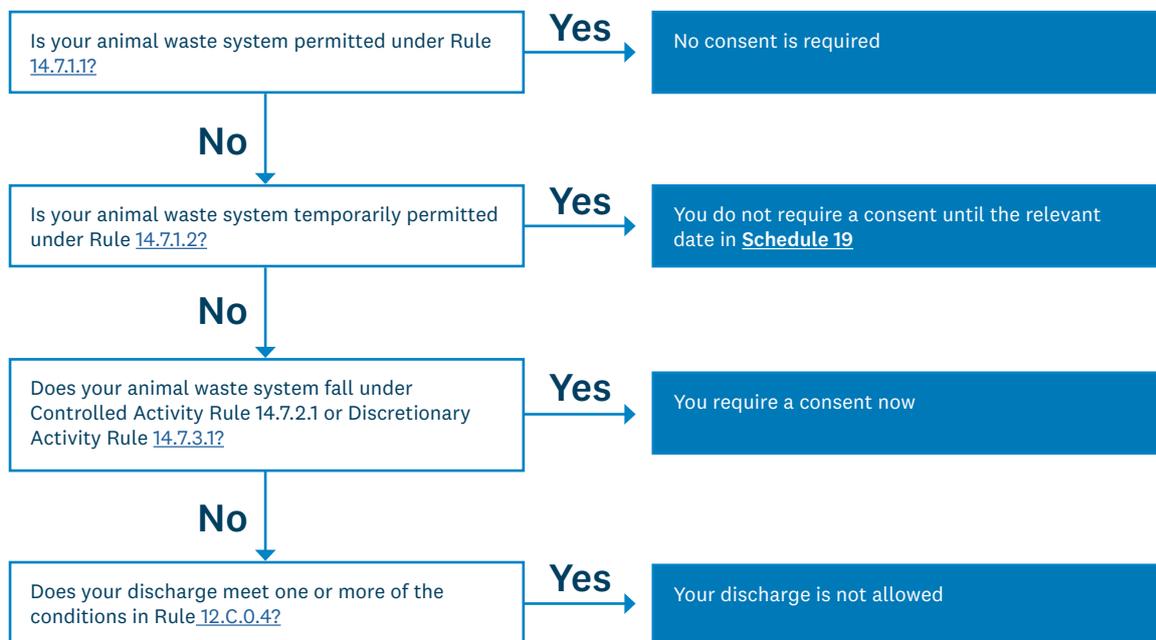


Maintenance of Animal Effluent Systems

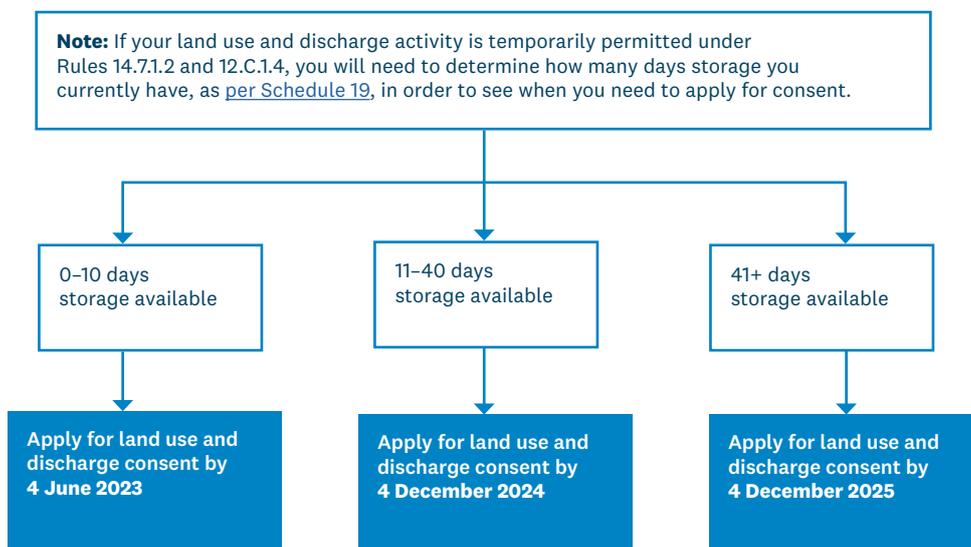
Maintenance of Animal Effluent Systems is required to ensure that they continue to operate as they are designed to.

Maintenance will be allowed under permitted activity and under consent (once consent is obtained). Maintenance does not include changing the scale of the structures or installing new elements to the system.

Animal effluent discharges – do you need resource consent?



Time frame for resource consents for storage and discharge under Schedule 19



Who is a suitably qualified person (SQP)?

To meet the permitted activity rule, you may need an SQP for your animal effluent system design (pond or tank) and to run the Dairy Effluent Storage Calculator for your farm.

The skills this person needs for each activity are shown below. To be an SQP for the effluent system, the person does not need to have all of the skills listed under the heading, just one of them.

When you are working with an SQP, please make sure they can meet these criteria.

SQP in Animal Effluent Systems:

- ▶ A relevant tertiary qualification in agricultural engineering, natural resources engineering or civil engineering and at least five years' professional experience in designing and constructing effluent management systems; or
- ▶ A relevant equivalent qualification (for example, international qualifications) and at least five years' professional experience in designing and constructing effluent management systems; or
- ▶ At least ten years' professional experience in designing and constructing effluent management systems.

SQP in Calculating Dairy Effluent Storage:

- ▶ At least five years' relevant professional experience in designing effluent management systems, and;
- ▶ For determining a conversion factor for animals that are not dairy cows, a relevant scientific tertiary qualification or relevant research experience.

Definitions and key terms

Animal effluent storage facility:

A pond, tank or structure primarily used for the containment or storage of animal effluent, but excludes any ancillary structures for collection, conveyance or treatment of liquid or solid animal effluent, such as sumps, stone traps and weeping walls.

- ✓ A pond, tank, or structure primarily used for the containment or storage of animal effluent (includes bladders)

X Not sumps, stone traps and weeping walls.

Animal effluent system:

The collection, storage, or treatment of liquid or solid animal effluent.

Dairy Effluent Storage Calculator (DESC):

The Dairy Effluent Storage Calculator available from the Dairy NZ website www.dairynz.co.nz

A Regionally Significant Wetland 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.

Liquid animal effluent:

Faeces and urine from land-based animals, including associated process water, washdown water, contaminants and sludge but excluding solid animal effluent.

For the purpose of this definition, it does not include incidental animal effluent present in livestock processing waste streams.

Solid animal effluent:

Solid excreta from land-based animals that cannot be pumped and sprayed, including bedding material and manure, but does not include dead animals or animal parts.