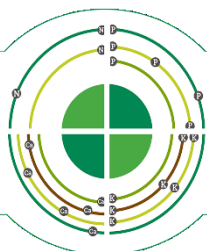


NMP Online User Update

Issue 28.20 | November 2023



NMP
Online

Table of Contents

1. Dairy cow washings.....	2
2. Dairy washings storage update.....	2
3. Two options.....	3
4. Example 1.....	3
5. Closed period changes and stored with slurry.....	4
6. Example 2.....	4
7. Example 3.....	6
8. End of Storage periods.....	7

1. Dairy cow washings

Dairy cow washings and associated calculations will apply 30 litres/cow/day. It will also use DAFM calculation methodology for 21 or 31 days (depending on relevant year) which will ensure there is greater compliance with potential DAFM inspections.

DAFM have clarified that where dairy soiled water is managed and stored independently, that DAFM use the maximum number of cows present in the inspection year because the regulations stipulate a minimum period for the storage of this material. Dairy soiled water is produced all year round save for when cows are dried off. See example 1 below.

However, where soiled water is managed and stored with slurry, it is thus treated with slurry rules. As such, DAFM use average numbers over the assessed winter, i.e. the previous winter; to determine compliance with over-all storage.

- In addition, the 30L per cow figure is subject to review this year and likely to change.
- The 21 days storage requirement will be inspected from autumn 2023.
- Where dairy soiled water is managed and stored independently then the minimum 21 or 31 day storage requirement must be available all year round regardless of cows being milked in December

Q. If soiled water is stored in a separate soiled water tank but that tank does not meet 21 or 31 day storage for soiled water, how is this treated during an inspection.

DAFM Response Soiled water storage systems are not interchangeable with long-term storage where a holding does not have the minimum statutory storage requirement in place for soiled water (in days). The holding is deemed ineligible for short-term soiled water storage. As such all soiled water produced on the holding is treated as slurry and is calculated as long-term storage and added to long-term storage.

2. NMP Dairy washings storage update

As per the updated SI the storage requirement for 21 or 31 days storage is being adjusted based on year of selection. This page below (Manure Storage – Storage Requirements); now contains a dropdown so the user can select the Dairy System; Spring or Winter Milk System, that will drive the storage period for 2023 plan years onwards.

The screenshot shows a web form titled "Manure Storage - Storage Requirements". It features a navigation button "< Prev" and a section for "Storage Requirements". The form contains several input fields: "County" set to "Carlow", "Weekly Rainfall" at "24 mm/week", "Default Storage Period" at "16 weeks", and "Custom Storage Period" at "0 weeks" with a note "(If different from above.)". A dropdown menu for "Dairy System" is highlighted with a red box. At the bottom, "Soiled Water method of application" is set to "Vacuum Tanker".

3. Two scenarios

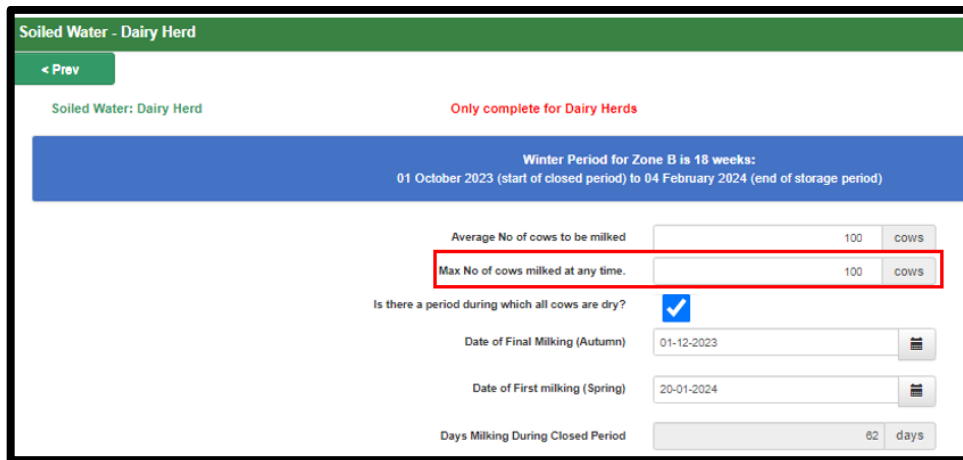
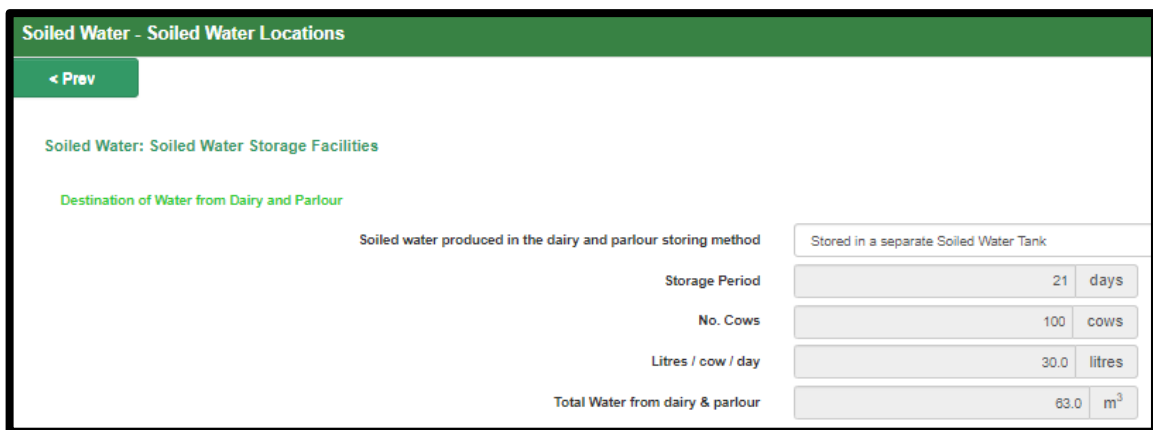
- **Scenario 1:** Standalone soiled water storage – Minimum storage is driven by the maximum number of cows milked during the year in question see Example 1.
- **Scenario 2:** Where dairy washings are stored with slurry; then the minimum storage required is driven by the average number of cows milked during the storage period. Cow Days must be calculated and divided by the number of days milking during the relevant storage period.
 - Spring calving herds that dry off for a period and dairy washings stored with slurry a rough guide is 65-75% of maximum cow numbers will give the average number of cows to be milked.
 - a. Any dairy washings created during the storage period are included in the calculations when stored with slurry.

4. Example 1

- **100 cow herd with Stand-alone dairy washings storage Zone A (Not stored with Slurry)**
- Where dairy soiled water is managed and stored independently, then it's the maximum number of cows (not average cow days) at any one time x 21 days (moving to 31 days in 2024) x 30L/cow/day.

100 dairy cows and dried off 1st December and start milking the 20th January. Winter of 2023/2024 so closed period starts 1st October 2022. End of the 16 weeks is 21st January. Dairy washings stored in a separate tank.

- For 2023 - 100 cows x **21 days** x 30 litres/cow/day (0.21m³ DSW Dairy Soiled water per week) = 63m³ dairy soiled water tank requirement.
- For 2024 - 100 cows x **31 days** x 30 litres/cow/day (0.21m³ DSW per week) = 93m³ soiled water tank requirement.
- **Total DSW = 63.00m³ DSW for 21 days storage.**
- **Total DSW = 93.00m³ DSW for 31 days storage. Subject to any changes to the 30 litres/cow/day.**
- **Note to users:** For stand-alone Dairy washings tanks the “Max number of cows to be milked is used” as per screen shot below. In NMP the *Soiled water - Winter Dairy Herd* section where DSW is stored in standalone tanks (key figure is the “Max No. of cows milked at any time” as this drives the storage requirements.

5. Closed period changes and stored with slurry

If dairy washings are stored with slurry, the system will now take into account changes on these calculations see examples 2 & 3 below.

6. Example 2

- **100 cow herd where dairy washings stored with slurry (Zone B – 18 weeks) and no dry period as some cows milked through the closed and storage periods:-**
- **Where stored with slurry see section 8 end of storage period as dairy washings produced during the storage period must be stored**
- 100 cows spring calving herd in zone B with 10 cows milked through the winter months. All dairy soiled water (DSW) collected with slurry. The 90 cows are dried off over the period 15th to 30th November.

STEP 1: 90 cows milked between 1st Oct and 14th Nov = 45 days x 90 cows = 4050 cow days x 0.03m³ DSW (dairy soiled water) per day = 121.5m³ DSW

STEP 2: 45 cows on average milked between 15th Nov and 30th Nov = 16 days x 45 cows = 720 cows days x 0.03m³ DSW per day = 21.6 m³ DSW

STEP 3: 10 cows x 18 weeks (1260 cow days) x 0.03m³ DSW per week = 37.60m³

- **Total DSW (STEPS 1-3 above) storage requirement of 180.90m³**
- These figures are added to the required slurry figures for animal slurry, as all material is stored as slurry. NMP does this automatically for the user.
- If there is unroofed collecting yards going to slurry as well etc. these are in addition to the figures above and is taken into account in NMP when these yards are added to the dirty yards under the slurry section in NMP online.

To calculate the **Average cows to be milked** go into the “Average number of cows to be milked” in the “Soiled Water – Dairy Herd, in NMP online, add the cow days; in Step 1, Step 2 and STEP 3 = 6,030. Divide this by the Storage period days in the screenshot below (6,030/126 = 48).

Note to Users for the example below is for zone B 18 weeks storage period.

1. Days milking during closed period – 1st October to 15th January = 107 days – not relevant to the calculations as its only information to the user and is not used in any of the calculations.
2. This farm 18 weeks storage period = 126 days - 1st October to 4th February

Insert this figure into the page below and users must select

7. Example 3

- **160 cow herd (Zone B – 18 weeks) where dairy washings are stored with slurry and there is a dry period.**
- 160 cows spring calving herd in zone B with no cows milked through the winter months. All dairy soiled water (DSW) collected with slurry.

STEP 1: 160 cows milked between 1st Oct and 31st Oct = 31 days x 160 cows = 4,960 cow days x 0.03m³ DSW per day = 148.80m³ DSW

STEP 2: 100 cows 1st November to 15th November = 15 days x 100 cows = 1500 cows days x 0.03m³ DSW per day = 45.00 m³ DSW

STEP 3: 30 cows 15th November to 2nd December = 17 days x 30 cows = 510 cows days x 0.03 DSW per day = 15.30m³ DSW

STEP 4: 30 cows 24th January to 4th February (**Note to user:** end of closed period is the 15th January but end of slurry storage period in Clare 18 weeks and this STEP is to calculate the DSW at the end of the storage period) = 12 days x 30 cows = 360 cows days x 0.03 DSW per day = 10.80m³ DSW

Total DSW (STEPS 1-4) = 219.90m³ DSW.

To calculate the average cow numbers to go into the “Average number of cows to be milked” in the “Soiled Water – Dairy Herd, in NMP online, add the cow days; in Step 1, Step 2, STEP 3 and STEP 4 = 7,330. Divide this by the Storage period days in the screenshot below (7,330/75 = 98).

Soiled Water - Soiled Water Locations

< Prev

Soiled Water: Soiled Water Storage Facilities

Destination of Water from Dairy and Parlour

Soiled water produced in the dairy and parlour storing method: Stored with Slurry

Storage Period (Days Storage Required minus Days dry during required Storage period)	75 days
No. Cows	98 cows
Litres / cow / day	30.0 litres
Total Water from dairy & parlour	220.5 m³

Soiled Water - Dairy Herd

< Prev

Soiled Water: Dairy Herd Only complete for Dairy Herds

Winter Period for Zone B is 18 weeks:
01 October 2023 (start of closed period) to 04 February 2024 (end of storage period)

Average No of cows to be milked	90 cows
Max No of cows milked at any time.	100 cows
Is there a period during which all cows are dry?	<input checked="" type="checkbox"/>
Date of Final Milking (Autumn)	02-12-2023
Date of First milking (Spring)	24-01-2024
Days Milking During Closed Period	63 days

8. End of Storage periods

Zone	Start of closed Period	End closed period Slurry	End of storage period
A – 16 weeks storage	1 st October	12 th January	21 st January
B – 18 weeks storage		15 th January	4 th February
C – 20 weeks storage		31 st January	18 th February
D - - 22 weeks storage		31 st January	3 rd March