



Total permitted animal capacity from all permits for this site:

400 milking cows (plus associated dry cows and replacements)

In consideration of Decision Summary RA20015, Approval RA20015 is issued to:

Name: Daystar Dairy Farm 1999 Inc. (the "permit holder")
Address: RR3 Ponoka AB T4J 1R3
Contact person: Jan Star

Permitted construction (based on the submitted site plan):

- Dairy barn (38 m x 62 m) including attached manure transfer pit (3 m x 9 m)
- Synthetically lined liquid manure storage (62 m x 56 m)

The permit holder shall comply with the requirements of the *Agricultural Operation Practices Act* (AOPA) and the regulations passed pursuant to that act.

The permit holder shall adhere to the descriptions contained in the filed applications for this approval and those for Registrations RA03032 and RA08006 along with the application for Authorization RA17003 together with the site plans, building plans, and other documents attached to those applications, unless otherwise noted in the following conditions.

The permit holder shall contact the NRCB at least 10 working days in advance of the desired inspection date to schedule the inspection in conditions five and nine, below.

The permit holder is responsible for all costs associated with monitoring, sampling, testing, recording and reporting requirements.

Construction conditions

New dairy barn and associated manure transfer pit

1. Decommissioning of water well under the new barn
Before starting construction of the new barn, the permit holder must properly decommission the water well under the new barn (see Technical Document RA20015, page 5 for the well's location). Written confirmation prepared by a qualified third party must be provided to the NRCB and Alberta Environment and Parks confirming that the water well has been properly decommissioned or reclaimed in accordance with the Water Wells and Ground Source Heat Exchange Systems Directive.
2. Construction above water table
The permit holder shall immediately cease construction and contact the NRCB if the water table is observed to be one metre or less from the bottom of the barn and pit's manure collection and storage liner at the time of construction.



3. Construction completion deadline
The permit holder shall complete the construction of the barn and pit prior to November 29, 2024. Upon written request, this deadline may be extended by the NRCB in writing.
4. Concrete
The concrete used to construct the manure collection and storage liner in the new barn and its associated manure transfer pit manure collection and storage liner must be sulphate resistant and have a:
 - a. minimum 56-day compressive strength of 30 MPa in the scrape alleys, and
 - b. minimum 56-day compressive strength of 32 MPa in the pits

The permit holders shall provide documentation to the NRCB confirming the specifications of the concrete used in the construction of the barn and transfer pit's liner. This documentation must be provided to the NRCB prior to the inspection referenced in condition five, or by a later date stated in writing by the NRCB.
5. Post construction inspection
The permit holder shall not place livestock or manure in the barn or the transfer pit until NRCB personnel have inspected the facility and stated in writing that it has been constructed in accordance with the terms and conditions of this approval.

Synthetically lined liquid manure storage

6. Construction above water table
The permit holder shall immediately cease construction of the facility and contact the NRCB if the water table is observed to be one metre or less from the bottom of the facility at the time of construction.
7. Construction completion deadline
The permit holder shall complete the construction of the synthetically lined liquid manure storage prior to November 29, 2024. Upon written request, this deadline may be extended by the NRCB in writing.
8. Liner requirement
The permit holders shall provide the NRCB with a written construction completion report, signed by a qualified third party, for the synthetically lined liquid manure storage. The report must confirm that the synthetically lined liquid manure storage cell:
 - has been constructed in accordance with the proposed design including the horizontal dimensions, vertical dimensions (including portions above and below ground) and side wall slopes
 - has been constructed in the proposed and approved location
 - has its inlet located in the lower quarter of the storage
 - accordance with the proposed design



- has the same liner as proposed and that the liner was installed in accordance with the liner supplier's requirements, including under membrane surface preparation and proper sealing at all seams
9. Post construction inspection
The permit holder shall not allow manure to enter the facility until NRCB personnel have inspected it and stated in writing that it has been constructed in accordance with the terms and conditions of this approval.

Operating conditions

10. Manure storage monitoring (from Registration RA03032)
The NRCB is to be notified immediately at 1-866-383-6722 if there is an overflow or leak from any of the manure storages.
11. Water well monitoring (from Registration RA08006)
Water quality tests shall be conducted annually on water wells within 100 m of the confined feeding operation. The annual water well test results shall be submitted to the NRCB no later than July 31 of each year unless otherwise directed in writing by the NRCB.
12. Slurrystore monitoring (from Registration RA08006)
The leakage detection system monitoring pipe is to be checked annually and records of monitoring events are to be kept for five calendar years. These records must be made available to the NRCB upon request. The NRCB is to be notified immediately if there is liquid in the monitoring pipe.

This approval becomes effective immediately, its conditions will remain in effect unless amended in writing by the NRCB.

The deemed registration, and NRCB issued Registrations RA03032 and RA08006 and Authorization RA17003 are hereby cancelled and are no longer in effect, unless Approval RA20015 is held invalid, in which case the previous permits will remain in effect.

April 9, 2021

(Original Signed)
Jeff Froese
Approval Officer



Approval RA20015 – Appendix

Existing permitted facilities

Facility	Dimensions (m)	Permit
Dairy barn (1994)	56 x 17	Deemed
Quonset/calf barn	33 x 12	
Dry cow barn*	32 x 17	
Concrete floored and steel walled liquid manure tank (slurrystore)	23.8 diameter x 5.8 high	RA03032
Dairy barn (2009)	50 x 21	RA08006
2009 barn addition	50 x 7	RA17003

* located under the 2020 proposed barn and is to be relocated. When the barn is relocated it will be used for cold storage and no longer considered to be a manure collection area or a manure storage facility.

Construction conditions

From Registration RA03032

1. Concrete and Steel Liquid Manure Storage
 - a. Concrete with a minimum 28 day strength of 30 MPa must be used for the floor of the concrete and steel manure storage and a copy of the receipt submitted to the NRCB.
2. Construction Completion
 - a. Construction is to be completed by January 31, 2006.
3. Completion Reports
 - a. A professional engineer must provide a certificate of completion to the NRCB prior to use of the liquid manure storage facility.
4. Inspections
 - a. The concrete floored and steel walled liquid manure storage must be inspected by the NRCB after construction completion and prior to manure being placed in the liquid manure storage.

From Registration RA08006

1. Completion Reports
 - a. A completion report confirming the barn liner material and construction procedures, prepared by a professional engineer, must be provided to the NRCB prior to animals entering the new barn. The completion report must include verification of: the barn location with respect to the site plan provided; the barn dimensions; the pit dimensions; the distance from the water table to the bottom of the pit floor liner material at the time of construction; and concrete strength, method of sulphate protection and reinforcing materials and spacing for the scraper alleys and pits.



2. Construction Completion
 - a. Construction of the manure collection and storage portions of the CFO facility(ies) must be completed prior to December 31, 2010 unless otherwise agreed upon by the NRCB.
3. Inspections
 - a. The barn pits and scraper alleys must be inspected by NRCB personnel prior to animals or manure being placed in the new barn.

From Authorization RA17003

1. Concrete
 - a. The concrete used to construct the manure storage system (pit) in the dairy barn addition must have a minimum 56-day strength of 32 MPa and a maximum water to cement ratio of 0.45. The permit holder shall provide proof to the NRCB to confirm the specifications of the concrete used in the construction. This document must be provided to the NRCB prior to the inspection referenced in condition 3 below, or by a later date stated by the NRCB.
 - b. The concrete used to construct the manure collection system (straw pack) in the barn addition must have a minimum 28-day strength of 25 MPa and a maximum water to cement ratio of 0.55. The permit holder shall provide proof to the NRCB to confirm the specifications of the concrete used in the construction. This document must be provided to the NRCB prior to the inspection referenced in condition 3 below, or by a later date stated by the NRCB.
2. The permit holder shall immediately cease construction of the dairy barn addition and contact the NRCB if the water table is observed to be one metre or less from the bottom of the dairy barn addition's manure storage liner.
3. The permit holder shall complete construction of the manure collection and storage portions of the dairy barn addition prior to December 1, 2017. Upon request, this deadline may be extended by the NRCB in writing.
4. The permit holder shall not place livestock or manure in the dairy barn addition until the NRCB has inspected it and stated in writing that it has been constructed in accordance with this authorization.