

**Total permitted animal capacity from all permits for this site:** 160 milking cows (plus associated dries and replacements)

In consideration of Decision Summary BA20002, Registration BA20002 is issued to:

Name:	Alieda Farms Ltd. (the "permit holder")
Address:	RR 1 Thorsby AB T0C 2P0
Contact person:	Cameron DeWit

Permitted construction (based on the submitted site plan):

- Dairy barn 76 m x 21 m
- Calf barn 24 m x 17 m
- Heifer barn 49 m x 21 m
- Dry cow barn 24 m x 21 m
- Solid manure storage pad 20 m x 30 m
- Synthetic lined liquid manure storage 58 m x 54 m x 4.5 m

### Ancillary construction:

• Milk house with office and storage – 18 m x 6 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 application together with the site plan, building plans, and other attached documents, 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 inspections in conditions #3, 5, 7, 9, 11 and 14.

### **Construction conditions**

1. Construction completion deadline

The permit holder shall complete construction of the dairy barn, calf barn, heifer barn, dry cow barn, solid manure storage pad, and synthetically lined liquid manure storage prior to December 1, 2025. Upon request, this deadline may be extended by the NRCB in writing.

Dairy barn

2. Concrete

The concrete used to construct the manure collection and storage liner of the dairy barn must meet the specifications for category B (liquid manure shallow pits) and category C (solid manure - wet) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners



for Manure Collection and Storage Areas." The permit holder shall provide written proof to the NRCB confirming the specifications of the concrete used. 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.

3. Post construction inspections (prior to populating facilities) The permit holder shall not place livestock or manure in the dairy barn until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

### Calf barn

4. Concrete

The concrete used to construct the manure collection and storage liner of the calf barn must meet the specifications for category D (solid manure -dry) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." The permit holder shall provide written proof to the NRCB confirming the specifications of the concrete used. This document must be provided to the NRCB prior to the inspection referenced in condition #5, below, or by a later date stated by the NRCB.

5. Post construction inspections (prior to populating facilities)

The permit holder shall not place livestock or manure in the calf barn until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

### Heifer barn

6. Concrete

The concrete used to construct the manure collection and storage liner of the heifer barn must meet the specifications for category D (solid manure -dry) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." The permit holder shall provide written proof to the NRCB confirming the specifications of the concrete used. This document must be provided to the NRCB prior to the inspection referenced in condition #7, below, or by a later date stated by the NRCB.

7. Post construction inspections (prior to populating facilities) The permit holders shall not place livestock or manure in the heifer barn until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

# Dry cow barn

8. Concrete

The concrete used to construct the manure collection and storage liner of the dry cow barn must meet the specifications for category D (solid manure -dry) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." The permit holder shall provide written proof to the NRCB confirming the specifications of



the concrete used. This document must be provided to the NRCB prior to the inspection referenced in condition #9, below, or by a later date stated by the NRCB.

9. Post construction inspections (prior to populating facilities)

The permit holder shall not place livestock or manure in the dry cow barn until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

Solid manure storage pad

10. Concrete

The concrete used to construct the manure collection and storage liner of the solid manure storage pad must meet the specifications for category C (solid manure - wet) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." The permit holder shall provide written proof to the NRCB confirming the specifications of the concrete used. This document must be provided to the NRCB prior to the inspection referenced in condition #11, below, or by a later date stated by the NRCB.

11. Post construction inspections (prior to populating facilities) The permit holder shall not place manure in the solid manure storage pad until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

Synthetic lined liquid manure storage

- 12. The permit holder shall install a leakage detection system as prescribed by the manufacturer of the synthetic liner used for the liquid manure storage. This system must be designed to detect failures in the synthetic lined liquid manure storage. This system must be approved in writing by the NRCB prior to construction of the liquid manure storage.
- 13. Construction completion report

The permit holder shall provide the NRCB with a written construction completion report for the synthetic lined liquid manure storage. The report must be signed by a qualified third party, and must:

- Confirm that the synthetic lined liquid manure storage was constructed at the location specified in the site plan provided with the application;
- Confirm the size of the synthetic lined liquid manure storage, including depth below grade; and
- Confirm that the synthetic liner was installed in accordance with the liner manufacturer's requirements, including under membrane surface preparation and proper sealing of the seams.

This document must be provided to the NRCB prior to the inspection referenced in condition #14, below, or by a later date stated by the NRCB.



14. Post construction inspection

The permit holder shall not place manure in the synthetic lined liquid manure storage until the NRCB has inspected the facility and stated in writing that it has been constructed in accordance with this registration.

# **Operating conditions**

Synthetic lined liquid manure storage leakage detection system monitoring

15. Unless otherwise specified by the NRCB in writing, the leakage detection system as required by condition #12 above, must be kept accessible, and be maintained in operable condition at all times. This system must be checked by the permit holder in accordance with monitoring statement BA20002 LDMS. In the event that damage to the liner is identified, or leachate is detected in the monitoring system, the NRCB must be notified immediately.

This registration becomes effective immediately. The registration conditions will remain in effect unless amended in writing by the NRCB.

September 7, 2021

(Original signed)

Nathan Shirley Approval Officer