

Total permitted animal capacity from all permits for this site:

350 milking cows (plus dries and replacements)

In consideration of Decision Summary RA20043, Approval RA20043 is issued to:

Name: Lucky Hill Dairy Ltd. (the "permit holder")
Address: RR1 Site 11 Box 11 Lacombe AB T4L 2N1

Contact person: Joanne VanderLinde

Permitted construction (based on the submitted site plan):

- cow barn (121.9 m x 32.9 m)
- a liquid manure storage concrete tank (diameter of 48.8 m x 4.3 m deep)

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 for Approvals RA10033M and RA20043, together with the site plan, building plans, engineering reports 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 inspection referenced in conditions #s 2 and 5.

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

Construction conditions

Cow barn

- The concrete used to construct the liner of the new cow barn 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 confirmation, from a qualified third party, confirming that the concrete used for the manure collection and storage areas meets the required specification.
- 2. The permit holder shall not allow livestock or manure in the new cow barn, until the facility has been inspected by NRCB personnel and confirmed by them, in writing, to have been constructed in accordance with the terms and conditions of this permit.
- 3. The permit holder shall complete construction of the manure collection and storage portions of the cow barn prior to November 30, 2023. Upon request, this deadline may be extended by the NRCB in writing.



Liquid manure storage concrete tank

- 4. The permit holder shall provide the NRCB with a written construction completion report for the liquid manure storage concrete tank. The report must be stamped and signed by a "professional engineer," as defined in the Standards and Administration Regulation, and must include:
 - Verification that the concrete manure storage tank was constructed according to the engineered drawings as described in the Richards Consulting & Associated Limited report submitted with the application and the site plan provided.
 - Verification of the tank size, including depths below and above grade.
 - Verification of the thickness, type and compressive strength of the concrete, the type, size and spacing of the reinforcement and the type of sealants used to seal joints and extrusions which penetrate the concrete liquid manure storage tank walls and floors.
 - Verification that the leak detection system under the concrete tank has been installed.
- 5. The permit holder shall not allow manure in the liquid manure storage concrete tank, until the facility has been inspected by NRCB personnel and confirmed by them, in writing, to have been constructed in accordance with the terms and conditions of this permit.
- 6. The permit holder shall complete construction of the manure collection and storage portions of the liquid manure storage concrete tank prior to November 30, 2023. Upon request, this deadline may be extended by the NRCB in writing.

Operating conditions

7. Unless otherwise specified by the NRCB in writing, the leak detection system for the liquid manure storage concrete tank, as required by condition #4 above, must be monitored by the permit holder in the fall.

In the event that damage to the concrete tank is identified, or leachate is detected in the monitoring system, the NRCB must be notified immediately

(Carried forward from Approval RA10033M)

- 8. (a). A groundwater monitoring system designed by a qualified professional must be installed around the liquid manure storage facility.
 - (b). The owner/operator shall conduct leak detection monitoring for the liquid manure storage facility as prescribed and authorized in writing, and as amended from time to time where appropriate, by the NRCB.
- 9. Any manure contaminated run-off to be fully contained on owner's property. Drainage courses or other bodies of water must be protected from possible contamination. The owner/operator will be required to maintain permanent grass buffer between outside pens and natural ponding area to north.



- 10. All manure to be directly injected into soil.
- 11. Dead animal designated collection site must not be visible to the public.

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

Approval RA10033M and Authorization RA17008 are hereby cancelled and are no longer in effect, unless Approval RA20043 is held invalid, in which case Approval RA10033M will remain in effect.

December 4, 2020

(Original Signed) Francisco Echegaray, P.Ag Approval Officer



Approval RA20043 - Appendix

Existing permitted facilities

- Earthen liquid manure storage (64 m x 46 m x 4.5 m deep)
 Dry barn/ heifer barn (56.2 m x 24.7 m)
- Irregular shaped dairy barn (43.9 m x 19.5 m) + (89 m x 30.2)
- Livestock corrals and pens