



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

---

In consideration of Decision Summary RA22018, Approval RA22018 is issued to:

Name: Five Star Cattle Co. Ltd. (the “permit holder”)  
Address: Box 5238 Lacombe AB T4L 1W9  
Contact person: Peter Heidelberg

**Permitted construction** (based on the submitted site plan):

- Freestall dairy barn (72 m x 33 m) with an underground manure pit (33.5 m x 3.5 m x 2.2 m deep)
- Addition to the existing freestall barn – 27 m x 33 m (for a total of 78.8 m x 33 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 Approvals RA12020 and RA17025, and Authorization RA17056 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 in conditions 2 and 5.

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

### **Construction conditions**

#### New freestall dairy barn

1. The concrete used to construct the liner of the new freestall dairy barn (with an underground manure pit) 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 confirmation, from a qualified third party, confirming that the concrete used for the manure collection and storage areas meets the required specifications.
2. The permit holder shall not allow livestock or manure in the new freestall dairy 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 new freestall dairy barn prior to November 30, 2026. Upon request, this deadline may be extended by the NRCB in writing.



---

Expansion to the existing freestall dairy barn

4. The concrete used to construct the liner of the expansion to the freestall dairy 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 specifications.
5. The permit holder shall not allow livestock or manure in the expansion to the freestall dairy 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.
6. The permit holder shall complete construction of the manure collection and storage portions of the expansion to the freestall dairy barn prior to November 30, 2026. Upon request, this deadline may be extended by the NRCB in writing.

**Operating conditions** (brought forward from Approval RA12020)

7. Any manure contaminated run-off to be fully contained on owner’s property. The permit holder must also ensure that manure stays on lands on which it is spread. Drainage courses or other bodies of water on property and other lands used for spreading must be protected from contamination.
8. The permit holder must maintain at all times high degree of cleanliness in and around the livestock facilities to minimize odour nuisances for neighbouring residents.
9. The permit holder shall conduct leak detection groundwater monitoring for the old EMS according to a leak detection groundwater monitoring system prescribed and authorized in writing, and as amended from time to time where appropriate, by the NRCB.
10. The NRCB is to be notified immediately if there is an overflow or leak from any of the manure storages.
11. The permit holder must maintain monthly inventory records of animals on site.
12. The animal inventory records must be available to the NRCB upon the request of the NRCB.
13. The permit holder shall sample and test raw groundwater from water well #0291845, according to water well monitoring requirements prescribed by the NRCB in writing. The NRCB may, based on the monitoring results and at its discretion, revise those requirements from time to time, in writing.

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



Approvals RA12020 and RA17025, and Authorization RA17056 are hereby superseded, and their content consolidated into this Approval RA22018, unless Approval RA22018 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Approval RA12020 and Authorization RA17056 will remain in effect, and Approval RA17025 will be amended.

April 4, 2023

(Original signed)

Francisco Echegaray  
Approval Officer



**Approval RA22018 – Appendix**

**Existing permitted facilities**

RA17025	Earthen liquid manure storage (EMS)	90 m x 90 m x 4 m deep
RA17056	Load out ramp	16 m x 12 m x 2.4 m deep
RA10069	Heifer barn (with pit)	100 m x 37 m; 4.3 m x 4.3 m x 3.0 m deep
	Solid manure storage pad	6.0 m x 6.0 m
RA03047	Expand open front shed to become free stall barn	33.5 m x 51.8 m
Deemed	Dairy barn (with pit)	101 m x 34 m; 42.6 m x 3.6 m x 2.4 m deep
	Milking parlor (ancillary)	46 m x 42 m
	EMS	91 m x 56 m x 6.7 m deep
	Calf barn	24 m x 24 m
	Barn pit	42.6 m x 3.6 m x 2.4 m deep

**Construction conditions** (brought forward from Approval RA17025)

Earthen liquid manure Storage (EMS)

- Construction completion deadline  
The permit holder shall complete construction of the EMS prior to December 31, 2020. Upon request, this deadline may be extended by the NRCB in writing.
- Construction completion report  
The permit holder shall provide the NRCB with a written construction completion report for the new EMS. The report shall be stamped and signed by a “professional engineer,” as defined in the Standards and Administration Regulation, and shall:
  - Certify that the EMS was constructed at the location specified in the site plan provided with the application
  - Provide the constructed EMS dimensions, including elevations below and above grade, berm height, liner thickness, and side slopes
  - Provide the in-situ density test results of the constructed EMS liner taken at the four bottom corners, the center, and along the four side slopes (corners and sides)
  - Certify that the liner material used in the EMS is the same material that was submitted for hydraulic conductivity testing
- Post construction inspection  
The permit holder shall not place livestock or manure in either the livestock barn (with underground manure pit) or the EMS until the NRCB has inspected both facilities and stated in writing that both facilities have been constructed in accordance with this approval.



---

**Construction conditions** (brought forward from Authorization RA17056)

- **Construction completion deadline**  
The permit holder shall complete construction of the load-out ramp prior to December 31, 2017. Upon request, this deadline may be extended by the NRCB in writing.
- **Construction completion report**  
The concrete used to construct the load-out ramp 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.
- **Post construction inspection**  
The permit holder shall not allow manure in the section of the in-barn pit where the load-out ramp is constructed until the load-out ramp has been inspected by NRCB personnel and determined by them, in writing, to have been constructed in accordance with the terms and conditions of this permit.

**Construction Conditions** (brought forward from Authorization RA10069)

- **Completion Reports**  
A completion report confirming the renovated heifer barn liner materials and construction procedures must be provided to the NRCB prior to animals entering the barn. The completion report must show that the requirements of the concrete technical guideline "TG 2004-02: Concrete Manure Liner Guidelines" must be met or exceeded in terms of the reinforcing, method of sulphate resistance, joint sealing, strength and thickness of the concrete floor in the barn in both existing and new areas.

A completion report confirming the solid manure storage pad liner materials and construction procedures must be provided to the NRCB prior to manure being stored on the pad. The completion report must show that the requirements of the concrete technical guideline "TG 2004-02: Concrete Manure Liner Guidelines" are met or exceeded in terms of the reinforcement, method of sulphate resistance, strength and thickness of the concrete used for the solid manure storage pad.

- **Construction Completion**  
Construction of the manure collection and storage portions of the CFO facilities must be completed prior to January 30, 2012 unless otherwise agreed upon by the NRCB.
- **Inspections**  
The manure storage portion of the barn must be inspected by NRCB personnel prior to animals or manure being placed in the new barn.

The solid manure storage pad must be inspected by NRCB personnel prior to manure being placed on the pad.



---

**Construction Conditions** (brought forward from Authorization RA03047)

- Completion Reports  
Existing Liquid Manure Storage (EMS)
  - A freeboard marker must be installed in the existing liquid manure storage that does not compromise the manure storage liner
- Construction Completion  
Construction must be completed by December 1, 2004
- Inspections  
The manure storage portion of the barn expansion must be inspected by NRCB personnel prior to animals or manure being placed in the barn expansion

The applicant must provide the approval officer 10 working days notice prior to the applicant's desired completion inspection

**Construction Conditions** (brought forward from Lacombe County permit 113/98)

- All livestock facilities (barns and manure storage) to be located no closer than 1,000 feet from nearest neighboring residence. Minimum Distance Separation should be maximized from the property boundaries in order to protect the possibility of future expansion of the operation.
- Minimum twelve-month manure storage capacity required for operation.
- Prior to start of construction, licensed engineer to confirm with County that site conditions at proposed storage location are suitable for earthen storage.
- If earthen storage deemed acceptable, inlet pipe to be placed near bottom of lagoon.
- Construction completion certificate engineer to be given to County upon completion of manure storage.
- Prior to start of construction, licensed engineer to confirm with County that site conditions at proposed storage locations are suitable for earthen storage.
- Construction completion certificate from licensed engineer to be given to County upon completion of manure storage.
- Shelterbelt to be planted around manure storage prior to start of operation