

**Total permitted animal capacity from all permits for this site:** 2,500 beef finishers

In consideration of Decision Summary RA24018, Approval RA24018 is issued to:

Name:Hendrik and Jenneke Van Aken and Martin Van Aken operating as Van<br/>Aken Farms Ltd. (the "co-permit holders")Address:RR 3 Ponoka, AB T4J 1R3Contact person:Martin Van Aken

Permitted construction (based on the submitted site plan):

- Livestock pen row 1 175 m x 30 m total area (partially previously permitted)
- Livestock pens row 2 177 m x 35 m (some pens previously constructed without permit)
- Livestock pens row 3 177 m x 35 m (all new pens)
- Catch basin 29 m x 29 m x 3.5 m deep

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

The co-permit holders shall adhere to the descriptions, the site plan, building plans, operating plan, engineering reports and other attached documents included with filed Application RA24018 and Registration RA02029A.

The co-permit holders shall contact the NRCB at least 10 working days in advance of the desired inspection date to schedule the inspection in conditions 3 and 6.

The co-permit holders are responsible for all costs associated with monitoring, sampling, testing, recording, and reporting requirements (this includes post construction reports).

#### **Construction conditions**

#### Catch basin

- 1. The co-permit holders shall immediately cease construction of the catch basin and contact the NRCB if the water table is observed to be one metre or less from the bottom of the liner of the catch basin.
- The co-permit holders shall provide the NRCB with a written construction completion report for the new catch basin. The report shall be stamped and signed by a "professional engineer", as defined in the Standards and Administration Regulation, and shall:
  - a. Certify that the catch basin was constructed at the location specified in the site plan provided with the application;
  - b. Certify that the liner material used in the catch basin is the same material that was tested for hydraulic conductivity;



- c. Certify that the catch basin was constructed according to the recommended construction procedures in the August 29, 2024, Site and Soil Assessment by Envirowest Engineering Inc.; and
- d. Provide the constructed catch basin dimensions, including elevations below and above grade, liner thickness, berm height, and side slopes.

This report must be provided to the NRCB before the inspection referenced in condition 3 below, or by a later date stated by the NRCB.

- 3. The co-permit holders shall not allow manure impacted runoff in the catch basin 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.
- 4. The co-permit holders shall complete construction of the manure collection and storage portions of the catch basin prior to November 30, 2027. Upon request, this deadline may be extended by the NRCB in writing.

#### New feedlot pens

- 5. The co-permit holders shall provide the NRCB with a written construction completion report for the new feedlot pens. The report shall be stamped and signed by a "professional engineer", as defined in the Standards and Administration Regulation, and shall:
  - a. Certify that the feedlot pens were constructed at the location specified in the site plan provided with the application;
  - b. Certify that the liner material used in the feedlot pens is the same material that was tested for hydraulic conductivity;
  - c. Certify that the feedlot pens were constructed according to the recommended construction procedures in the August 29, 2024 Site and Soil Assessment by Envirowest Engineering Inc.; and
  - d. Provide the constructed pen dimensions, including liner thickness.

This report must be provided to the NRCB before the inspection referenced in condition 6 below, or by a later date stated by the NRCB.

- 6. The co-permit holders shall not allow livestock or manure in the new feedlot pens until the facilities have 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.
- 7. The co-permit holders shall complete construction of the manure collection and storage portions of the feedlot pens prior to November 30, 2027. Upon request, this deadline may be extended by the NRCB in writing.

#### Already constructed (unauthorized) feedlot pens

8. The co-permit holders shall provide the NRCB with a written soils report for the already constructed (unauthorized) feedlot pens. The report shall be stamped and signed by a



"professional engineer", as defined in the Standards and Administration Regulation, and shall:

- a. Provide the particle size analysis results for a minimum of 8 soil samples (two samples in each of the four pens). Samples must be obtained by hand or mechanical auger.
- b. Provide a log for each of the 8 boreholes in the unauthorized pens. Each borehole must extend a minimum of 0.5 m below grade. Each log must indicate if the soil encountered is fill or native soil.
- e. Provide an evaluation of the particle size analysis results from the unauthorized pens' soil samples compared to the August 2024 soil analysis and 2002 hydraulic conductivity in Section 2.0 of the August 29, 2024, Site and Soil Assessment by Envirowest Engineering Inc. The evaluation must explain how each of the soil samples from the unauthorized pens meet (or do not meet) the requirements of the regulations for a solid manure storage compacted liner.

This report must be received by the NRCB by September 30, 2025. Upon request, this deadline may be extended by the NRCB in writing.

# **Operating conditions**

- 9. The owner/operator shall conduct leak detection groundwater monitoring for the earthen manure storage 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. (See RA24018 Leak Detection Groundwater Monitoring Statement)
- 10. The applicant must provide the results of drinking water quality tests from each of the two water wells located to the east/northeast of the dairy barn on NE 19-42-26 W4 on an annual basis by January 31 of each year. This frequency of sampling and testing may be varied by written notice from the NRCB. (See RA24018 Water Well Monitoring Statement)

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

Registration RA02029A is hereby superseded, and its content consolidated into this Approval RA24018, unless Approval RA24018 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Registration RA02029A will remain in effect.

November 29, 2024

(Original signed)

Lynn Stone Approval Officer



# Approval RA24018 – Appendix

# Existing permitted facilities

Facility	Dimensions (m)	From
Dairy barn, including addition	25.6 m x 87.0 m (approx)	Pre-2002, and RA02029A
Liquid Earthen Manure	70 m x 50 m x 5 m	RA02029A
Storage (EMS)		
Existing feedlot pens (row 1)	106.0 m x 31.0 m	Pre-2002
West outdoor pen (behind	41.6 m x 51.34 m	Pre-2002
barn)		

# Construction conditions (brought forward from Registration RA02029A)

- 2. Concrete Manure Storage Barn floors and gutters
  - a. The concrete floors and gutters are to be constructed in such a manner so as to be considered manure tight.
  - b. A professional engineer is to provide a final "as-built" set of engineered drawings of the barn floors and gutters to the NRCB, signed and sealed by the professional engineer.
  - c. A professional engineer is to provide a certificate of completion for the concrete works and the compacted clay liner prior to use of the barn.
  - d. Vertical control joints must be installed (a maximum of 10 metres apart) on the 8"x8' concrete manure pit walls.
  - e. A compacted clay liner a minimum of 1 metre thick must be constructed under the free stalls of the dairy barn.
- 3. Liquid Earthen Manure Storage (EMS) 70 m x 50 m x 5.0 m structure
  - a. The NRCB Approvals Officer is to be notified immediately if, during construction, site conditions vary from borehole log results.
  - EMS construction must be according to the recommendations in the Envirowest Engineering Inc. report and Envirowest Engineering Inc. correspondence. 1Registration Application Number: RA02029A
  - c. The bottom of the liner must be at least 1 metre above the water table at the time of construction.
  - d. The liner must be not less than 1 metre thick.
  - e. The side and end wall liners must be not less than 1.2 metres thick.
  - f. The horizontal to vertical ratio of the inside walls must not be less than 3:1.
  - g. The horizontal to vertical ratio of the outside walls must not be less than 4:1.
  - h. The outside wall and freeboard must have a covering of top soil and be seeded to grass to prevent erosion.
  - i. Trees, shrubs and deep-rooted plants must not be grown on or near the EMS walls.
  - j. The EMS must be filled within the bottom quarter.
  - k. Locations where the EMS is filled or the contents agitated or discharged must be protected from becoming damaged.
  - I. The inside and outside walls of the EMS must be protected from scouring and erosion, wave and flood action.



- m. The liner must be sealed so that piping and other extrusions that pass through or under it do not leak or create leaks in the liner.
- n. The owner or operator must construct and maintain a fence surrounding the EMS to prevent unauthorized access.
- o. The owner or operator must install at each entrance to the EMS a clearly visible sign warning of the nature and danger of the facility.
- p. A clearly visible marker showing freeboard level must be installed in the EMS. This marker must not puncture the EMS liner.
- q. Year round access to the EMS must be provided.
- r. Construction of the EMS must be supervised by a professional engineer.
- s. A completion report from a professional engineer for the EMS must be provided to the NRCB prior to the EMS being used.
- 5. Water ditch
  - a. The new ditch draining clean run-on water from the farm site between the barn expansion and the EMS must not affect the exterior side slopes of the lagoon.
  - b. The new ditch must have a covering of top soil and be seeded to grass to prevent erosion.
- 8. Inspections
  - a. All facilities associated with this application are to be inspected by the NRCB upon completion and prior to use.