

Technical Document RA25011



Part 2 – Technical Requirements

Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

NRCB USE ONLY			Application number	Legal land description
<input type="checkbox"/> Approval	<input checked="" type="checkbox"/> Registration	<input type="checkbox"/> Authorization	RA25011	S1/2 of NE 28-39-28 W4M
<input type="checkbox"/> Amendment				

APPLICATION DISCLOSURE

This information is collected under the authority of the *Agricultural Operation Practices Act (AOPA)*, and is subject to the provisions of the *Freedom of Information and Protection of Privacy Act*. This information is public unless the NRCB grants a written request that certain sections remain private.

Any construction prior to obtaining an NRCB permit is an offence and is subject to enforcement action, including prosecution.

I, the applicant, or applicant's agent, have read and understand the statements above, and I acknowledge that the information provided in this application is true to the best of my knowledge.

2/4/2025

Date of signing

Iron Ridge Farms LTD

Corporate name (if applicable)

Signature

Kevin James Van de Pol

Print name

GENERAL INFORMATION REQUIREMENTS

Proposed facilities: list all proposed confined feeding operation facilities and their dimensions. Indicate whether any of the proposed facilities are additions to existing facilities. (attach additional pages if needed)	
Proposed facilities	Dimensions (m) (length, width, and depth)
putting concrete liner in the barn (barn conversion)	70.8, 22.2, 6m
manure pad	24.4, 26, 6m
	22.8
AO note: there is an existing barn on site; applicant has proposed to renovate the concrete liner of the barn. The CFO will be operated on a solid manure system only.	

Existing facilities: list ALL existing confined feeding operation facilities and their dimensions		
Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
barn	70.8, 22.2, 4.2	Dimensions confirmed; facility not previously permitted
office attached to barn east side	6, 13, 3	

NRCB USE ONLY
Application is for a new CFO.

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DECLARATION AND ACKNOWLEDGMENT OF APPLICANT CONCERNING WATER ACT LICENCE

issued by Alberta Environment and Protected Areas (EPA) for a confined feeding operation (CFO)

Date and sign one of the following four options

OPTION 1: Applying through the NRCB for both the AOPA permit and the Water Act licence

I **DO** want my water licence application coupled to my AOPA permit application.

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent

OPTION 2: Processing the AOPA permit and Water Act licence separately

1. I (we) acknowledge that the CFO will need a new water licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. I (we) request that the NRCB process the AOPA application **independently** of EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant the *Water Act* licence application.
5. I (we) acknowledge that any such construction or livestock populating will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water licence application number(s) 00507687-00-00

Signed this 4 day of February, 2025.

Signature of Applicant or Agent

OPTION 3: Additional water licence not required

1. I (we) declare that the CFO will not need a new licence from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. **Provide:** Water license number(s) or water conveyance agreement details _____

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent

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OPTION 4: Uncertain if *Water Act* licence is needed; acknowledgement of risk (for existing CFOs only)

1. At this time, I (we) do not know whether a new water licence is needed from EPA under the *Water Act* for the development or activity proposed in this AOPA application.
2. If a new *Water Act* licence is needed, I (we) request that the NRCB process the AOPA application **independently** of EPA's processing of the CFO's application for a water licence.
3. In making this request, I (we) recognize that, if this AOPA application is granted by the NRCB, the NRCB's decision will not be considered by EPA as improving or enhancing the CFO's eligibility for a water licence under the *Water Act*.
4. I (we) acknowledge that any construction or actions to populate the CFO with additional livestock pursuant to an AOPA permit in the absence of a *Water Act* licence will **not** be relevant to EPA's consideration of whether to grant my *Water Act* licence application, if a new water licence is needed.
5. I (we) acknowledge that any such construction or livestock increase will be at the CFO's sole risk if the *Water Act* licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the *Water Act*. This risk includes being required to depopulate the CFO and/or to cease further construction, or to remove "works" or "undertakings" (as defined in the *Water Act*).
6. **AS RELEVANT:** I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order* [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
7. **Provide:** Water license number(s) or water conveyance agreement details _____

Signed this ____ day of _____, 20____.

Signature of Applicant or Agent



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GENERAL ENVIRONMENTAL INFORMATION

(complete this section for the worst case of the existing facility which is the closest to water bodies or water wells and for each of the proposed facilities)

Facility description / name *(as indicated on site plan)*

Existing: _____ Proposed 1: renovate barn with solid manure pad

Proposed 2: _____ Proposed 3: _____

Facility and environmental risk information		Facilities				NRCB USE ONLY	
		Existing	Proposed 1	Proposed 2	Proposed 3	Meets requirements	Comments
Flood plain information	What is the elevation of the floor of the lowest manure storage or collection facility above the 1:25 year flood plain or the highest known flood level?	<input type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Not located in floodplain
	Surface water information						
	How many springs are within 100 m of the manure storage facility or manure collection area?		0			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	None , confirmed on site
	How many water wells are within 100 m of the manure storage facility or manure collection area?		1			<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES with exemption	One well ~5 m east of the barn
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)		100			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Seasonal creek ~100 m north of proposed solid manure pad
Groundwater information	What is the depth to the water table?		?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	~15 m from drilling report
	What is the depth to the groundwater resource/aquifer you draw water from?		?			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	30.8 m from WW ID 167138

Additional information (attach supporting information, e.g. borehole logs, records, etc. you consider relevant to your application)

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NRCB USE ONLY
WATER WELL AND SURFACE WATER INFORMATION

Well IDs: 167138

Surface water related concerns from directly affected parties or referral agencies: YES NO

Groundwater related concerns from directly affected parties or referral agencies: YES NO

Water wells N/A

If applicable, exemption for 100 m distance requirements applied: YES NO Condition required: YES NO

Surface water N/A

If applicable, exemption for 30 m distance requirements applied: YES NO Condition required: YES NO

Water Well Exemption Screening Tool N/A

Water Well ID	Preliminary Screening Score	Secondary Screening Score	Facility
167138	16 = continue to next section	11 = exemption more likely	Barn renovation
167138	16 = continue to next section	10 = Exemption more likely	Solid manure pad

Groundwater or surface water related comments:

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ENVIRONMENTAL RISK SCREENING INFORMATION

ERST for proposed facilities

Facility	Groundwater score	Surface water score	File number
Renovated barn	Low	Low	RA25011
Solid manure pad	Low	Low	RA25011

ERST for existing facilities

Facility	Groundwater score	Surface water score	File number

ERST related comments:

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Application under the *Agricultural Operation Practices Act* for a confined feeding operation, manure collection area, and/or manure storage facility(ies)

DISTANCE OF ANY MANURE STORAGE FACILITY (EXISTING OR PROPOSED) TO NEIGHBOURING RESIDENCES

Neighbour name(s)	Legal land description	Distance (m)	NRCB USE ONLY				
			Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	Meets regulations
Hueppelsheuser	NW ; 27 ; 39 ; 28 ; 4	310.17	Agriculture	1	315	N/A	Yes
Vanderlinde	North half NE ; 28 ; 39 ; 28 ; 4	579.58	Ag	1	575		Yes

LAND BASE FOR MANURE AND COMPOST APPLICATION (complete only if an increase in livestock or manure production will occur)

Name of land owner(s)*	Legal land description	Usable area** (ha)	Soil zone ***	NRCB USE ONLY	
				Usable area (ha)	Agreement attached (if required)
Iron Ridge Farms	South half NE ; 28 ; 39 ; 28 ; 4	20.23	Black		N/A
Van de Pol Dairy	NE ; 28 ; 39 ; 28 ; 4	6.47	Black		Yes
Van de Pol Dairy	SW ; 5 ; 40 ; 27 ; 4	62	Black		Yes
Van de Pol Dairy	NW ; 30 ; 39 ; 1 ; 4	48	Black		Yes
				Total	136.7 ha

* If you are **not** the registered landowner, you must attach copies of land use agreements signed by all landowners.

** Available manure spreading area (excluding setback areas from residences, common bodies of water, water wells, etc. as identified in Agdex 096-5 [Manure Spreading Regulations](#))

*** Brown, dark brown, black, grey wooded, or irrigated

Additional information (attach any additional information as required)

Manure Spreading Agreement

Van de Pol Dairy Inc agree to allow Iron Ridge Farms LTD (applicant)

to spread manure on the following fields during all? (calendar year).

Land location	Acres	Suitable for spreading	Soil zone
SW ; 5 ; 40 ; 27 ; 4	155	155 ac	black
NW ; 30 ; 39 ; 1 ; 4	118	118 ac	Black
NE ; 28 ; 39 ; 28 ; 4	16	16 ac	Black

Signed:  _____

Date: 2/4/2025 _____

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NRCB USE ONLY

MINIMUM DISTANCE SEPARATION

Methods used to determine distance (if applicable): Google Earth

Margin of error (if applicable): +/- 3 m

Requirements (m): Category 1: 250 Category 2: 333 Category 3: 416 Category 4: 666

Technology factor: YES NO

Expansion factor: YES NO

MDS related concerns from directly affected parties or referral agencies: YES NO

LAND BASE FOR MANURE AND COMPOST APPLICATION

Land base required: 74.2 ha

Land base listed: 136.7

Area not suitable: accounted for

Available area 136.7 ha

Requirement met: YES NO

Land spreading agreements required: YES NO

Manure management plan: YES NO If yes, plan is attached:

PLANS

Submitted and attached construction plans: YES NO

Submitted aerial photos: YES NO

Submitted photos: YES NO

GRANDFATHERING

Already completed: YES NO N/A

If already completed, see _____

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SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner

(complete a copy of this section for EACH barn, feedlot, and storage facility for solid manure, composting materials, or compost with a concrete liner)

- Facility description / name (as indicated on site plan)
1. Solid Manure Pad
 2. barn renovation

Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	NRCB USE ONLY Estimated storage capacity (m ³)
1.	24.4	22.8	7 0	
2.	70.8	22.2	7 0	
TOTAL CAPACITY				Sufficient storage

AO note: barn renovation will not include pits, as CFO will be operated on solid manure only.

I plan to use a short-term solid manure storage (STMS) as part of my manure storage and handling plan for this CFO. The AOPA requirements for STMS are set out in the NRCB [Short-Term Solid Manure Storage Requirements Fact Sheet](#).

Surface water control systems

Describe the run-on and runoff control system
 There will be a 2ft x8in concrete wall around the sides and back of the pad and the pad will have a slop into it so water can not run out

Liner protection

Describe how the physical integrity of the liner will be maintained
 it has rebar in it to help the integrity of concrete

NRCB USE ONLY
 Requirements met: YES NO

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SOLID MANURE, COMPOST, & COMPOSTING MATERIALS: Barns, feedlots, & storage facilities - Concrete liner (cont.)

Concrete liner details

Concrete thickness 6 in	Method of sulphate protection: Type 50
Concrete strength 30 Mpa	Concrete reinforcement size and spacing rebar 12in squares

Concrete requirements can be found in Technical Guideline Agdex 096-93
 Guideline minimums:
 Solid manure: 25MPa (D)
 Solid manure (wet): 30MPa (C)
 Method of sulphate protection:
 Type 50 or Type 10 with fly ash or equivalent

NRCB USE ONLY

Requirements met: YES NO
 Condition required: YES NO
 Report attached: YES NO

Additional information (attach as required)

NRCB USE ONLY

Nine month manure storage volume requirements met YES YES With STMS NO

Depth to water table: ~15 m Requirements met: YES NO

Depth to Uppermost groundwater resource: 30.8 m Requirements met: YES NO

ERST completed: see ERST page for details

Surface water control systems

Requirements met: YES NO Details/comments:

Concrete liner details

A condition will be included requiring the concrete liner to meet the minimum standards for category D (solid manure - dry) and category C (solid manure - wet) in Technical Guideline Agdex 096-93.

Leakage detection system required: YES NO If yes, please explain why.

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NRCB USE ONLY

ALL SIGNATURES IN FILE

YES NO

DATES OF APPROVAL OFFICER SITE VISITS

February 11, 2025	

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: March 6, 2025

Municipality: Lacombe County

letter sent response received written/email verbal no comments received

Alberta Health Services: N/A

letter sent response received written/email verbal no comments received

Alberta Environment and Parks: N/A

letter sent response received written/email verbal no comments received

Alberta Transportation: N/A

letter sent response received written/email verbal no comments received

Alberta Regulatory Services: N/A

letter sent response received written/email verbal no comments received

Other: ATCO Gas and Pipelines Ltd N/A

letter sent response received written/email verbal no comments received

Other: _____ N/A

letter sent response received written/email verbal no comments received