

# Technical Document LA24049

## 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)

<b>NRCB USE ONLY</b>	Application number	Legal land description
	<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Registration <input type="checkbox"/> Authorization <input type="checkbox"/> Amendment	<b>LA24049</b>

### 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.

Dec 2/24  
Date of signing



Lloyd Vossebelt

Corporate name (if applicable)

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)
Layer Barn - new construction <b>plus ancillary facilities included in proposed dimensions</b>	67X14X7 tall
Attached indoor manure storage	6m x 6m
<b>The barn and attached manure storage will be L-shaped</b>	

**Existing facilities:** list ALL existing confined feeding operation facilities and their dimensions

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
None		

**NRCB USE ONLY**

Application for a new CFO, no existing facilities

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If a new facility is replacing an old facility, please explain what will happen to the old facility and when.  N/A

January 2025-August 2026

Construction completion date for proposed facilities \_\_\_\_\_

**Additional information**

A layer facility with an indoor egg collecting area, office, cooler and associated electrical/equipment will be constructed. All concrete floor construction with indoor manure storage.

**Livestock numbers:** Complete only if livestock numbers are different from what was identified in the Part 1 application. Note: if livestock numbers increase in your Part 2 application, a new Part 1 application must be submitted which may result in a loss of priority for minimum distance separation (MDS).

Livestock category and type (Available in the Schedule 2 of the Part 2 Matters Regulation)	Permitted number	Proposed increase or decrease in number (if applicable)	Total
The application is for a new CFO with 22,500 chicken layers			



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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<sup>24</sup>.

\_\_\_\_\_  
*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) \_\_\_\_\_

Signed this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_  
*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 Cistern with hauled  
water/city of Lethbridge potable water \_\_\_\_\_

Signed this 26 day of November, 20<sup>24</sup>.

\_\_\_\_\_  
*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*







AO: this parcel is zoned business light industrial, no residence

N



Site 1 - Option 2

1475 feet

1185 feet

Township Rd 100

1480 feet

1610 feet

J-Line Equipment

NE-35-09-20-W4



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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: Layer Barn with attached indoor manure storage

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 in a flood plain
	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	No springs observed
	How many water wells 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	No water wells observed or registered to quarter
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)		6+ km			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Irrigation canal 4.3 km west of proposed CFO
Groundwater information	What is the depth to the water table?		N/A			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	No evidence of a shallow water table
	What is the depth to the groundwater resource/aquifer you draw water from?		N/A			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	WW ID 106292 east of property UGR >16.76m

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

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**NRCB USE ONLY**  
**ENVIRONMENTAL RISK SCREENING INFORMATION**

ERST for proposed facilities

Facility	Groundwater score	Surface water score	File number
Layer barn with attached indoor manure storage	Low	Low	LA24049

ERST for existing facilities

Facility	Groundwater score	Surface water score	File number
None			

ERST related comments:

New CFOs that meet or exceed AOPA requirements are presumed to pose a low risk to surface water and groundwater



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**NRCB USE ONLY**

**WATER WELL AND SURFACE WATER INFORMATION**

Well IDs: 106292 \_\_\_\_\_  
 \_\_\_\_\_

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

**Groundwater or surface water related comments:**



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### 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
Brain and Helen Mantler	SW-2-10-20-W4	450	Rural Ag	1	432 m		Yes
John Fehr	SE-2-10-20-W4	361	Rural Ag	1	361 m		Yes
Hermon Verdyn	SE-2-10-20-W4	450	Rural Ag	1	450 m		Yes
J Line Equipment	NW-35-9-20-W4	490	Rural Ag	1	490 m		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)
<del>403 Farms Ltd</del>	<del>NW-25-9-20-W4</del>	<del>60</del>	<del>Irrigated</del>	Spreading agreement not provided, however applicant has otherwise provided sufficient land	
D & MJ Vossebelt	NE-35-9-20-W4	60	Irrigated	60 ha	
D & MJ Vossebelt	SE-2-10-20-W4	56	Irrigated	56 ha	
Total					

\* 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)**



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## NRCB USE ONLY

### MINIMUM DISTANCE SEPARATION

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

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

Requirements (m): Category 1: 309 m Category 2: 412 m Category 3: 515 m Category 4: 824 m

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: 63 irrigated hectares

Land base listed: 116 irrigated hectares

Area not suitable: Already subtracted

Available area 116 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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**NRCB USE ONLY**

**ALL SIGNATURES IN FILE**

YES  NO

**DATES OF APPROVAL OFFICER SITE VISITS**

January 15, 2025	

**CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES**

Date deeming letters sent: January 7, 2025

Municipality: Lethbridge 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:** County of Lethbridge Rural Water Association Ltd  N/A

letter sent       response received       written/email       verbal       no comments received

**Other:** SMRID  N/A

letter sent       response received       written/email       verbal       no comments received

Alpha Bow Energy Ltd.       letter sent       no comments received



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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. ~~Layer barn~~ Attached indoor manure storage
  2. Layer barn

### Manure storage capacity

	Length (m)	Width (m)	Depth below grade to the bottom of the liner (m)	<b>NRCB USE ONLY</b> Estimated storage capacity (m <sup>3</sup> )
1.	6	6	Constructed at grade	
2.	48	12.5	Constructed at grade	
TOTAL CAPACITY				manure pads are 9 months storage

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  
 Indoor storage - no runoff

Roof and walls prevents run-on and run-off

### Liner protection

Describe how the physical integrity of the liner will be maintained  
 Minimal traffic over concrete liner

**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 4"	Method of sulphate protection: Air entrapment, high sulphate resistant blend
Concrete strength 30 mpa @ 28 days	Concrete reinforcement size and spacing rebar, 12" centres 3/8" rebar diameter.

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: No evidence of a shallow water table Requirements met:  YES  NO

Depth to Uppermost groundwater resource: >16.76 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

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