

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 RA24042	Legal land description SW 22-40-27 W4M
<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Registration <input type="checkbox"/> Authorization <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.

Jan, 6, 2025

Date of signing
Thornspyc Dairy Ltd

Corporate name (if applicable)

Signature
Jan van de Brake
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)
1. New solid bedding pack barn (Lactating & Dry)	110m, 40m, 0
2. Youngstock #2, Replacement and addition to youngstock shed	125m, 16m, 0
3. Youngstock #3, Addition to youngstock pack shed (1 continuous shed)	125m, 16m, 0

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

Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Calf Hutch Barn	28m, 9m, 0	
Youngstock #2 Pack Shed with concrete alley	53m, 13m, 0	
Youngstock #3 (pack shed w/ Concrete)	120m, 25m, 0	
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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

The old facility will be disposed of before building

Construction completion date for proposed facilities Winter 2026

Additional information

Facilities will be built in stages with hopes of starting the first as soon as we have the permit in place.

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
Lactating dairy cattle	150	150	300
AO note: applicant has also requested a grandfathering for 150 lactating cows			

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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) _No 21968, File 80315 _____

Signed this 16 day of December, 2024. _____ 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: Existing

Proposed 1: Proposed pack barn

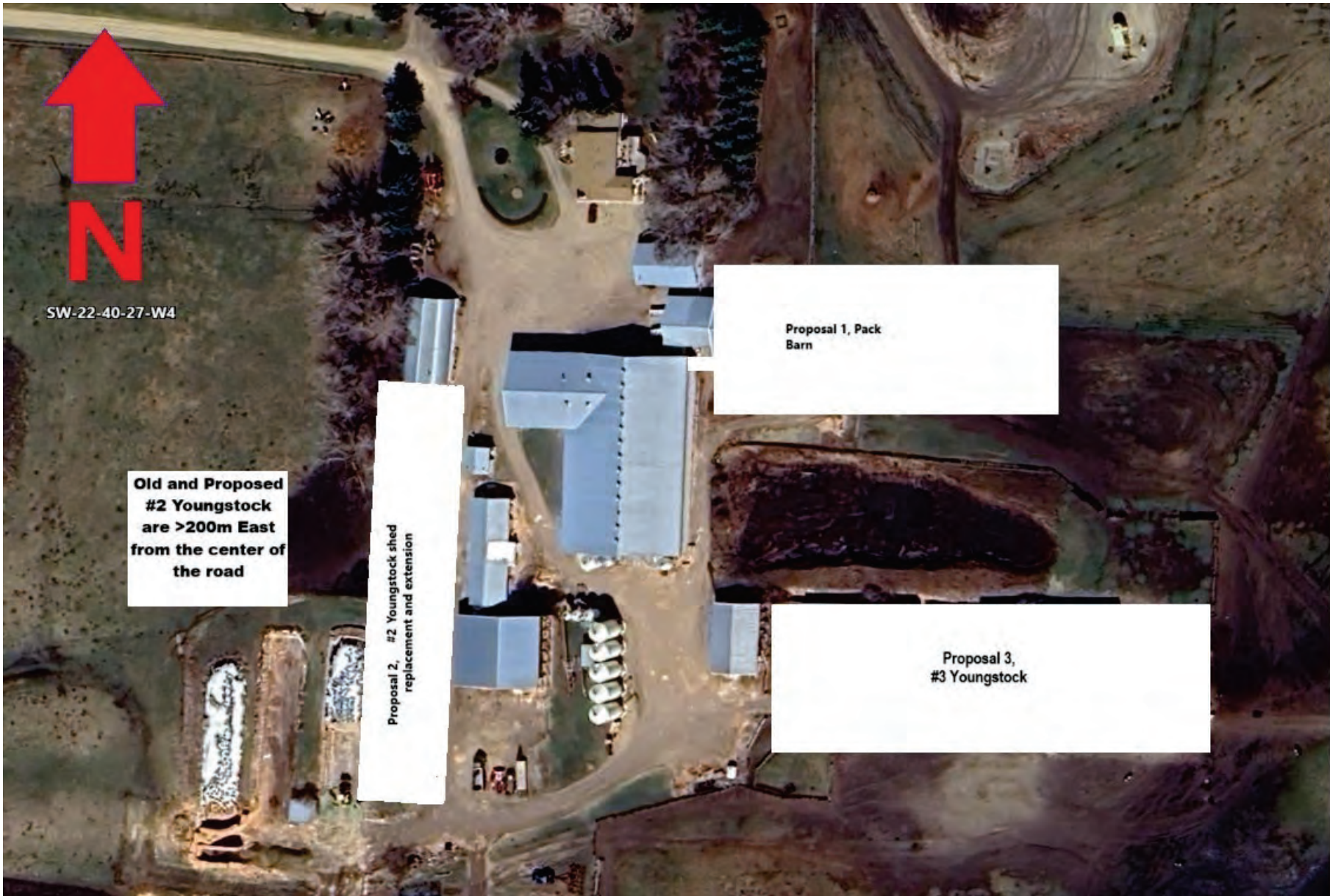
Proposed 2: #2 youngstock

Proposed 3: #3 youngstock

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 checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> >1 m <input type="checkbox"/> ≤ 1 m	<input checked="" type="checkbox"/> > 1 m <input type="checkbox"/> ≤ 1 m	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	
	Surface water information						
	How many springs are within 100 m of the manure storage facility or manure collection area?	0	0	0	0	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	
	How many water wells are within 100 m of the manure storage facility or manure collection area?	1	1	0	0	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	
	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	275m	345m	370m	225m	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	
Groundwater information	What is the depth to the water table?	17.6m 17.6m + 11.5m				<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	
	What is the depth to the groundwater resource/aquifer you draw water from?	45m and 29m				<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	

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





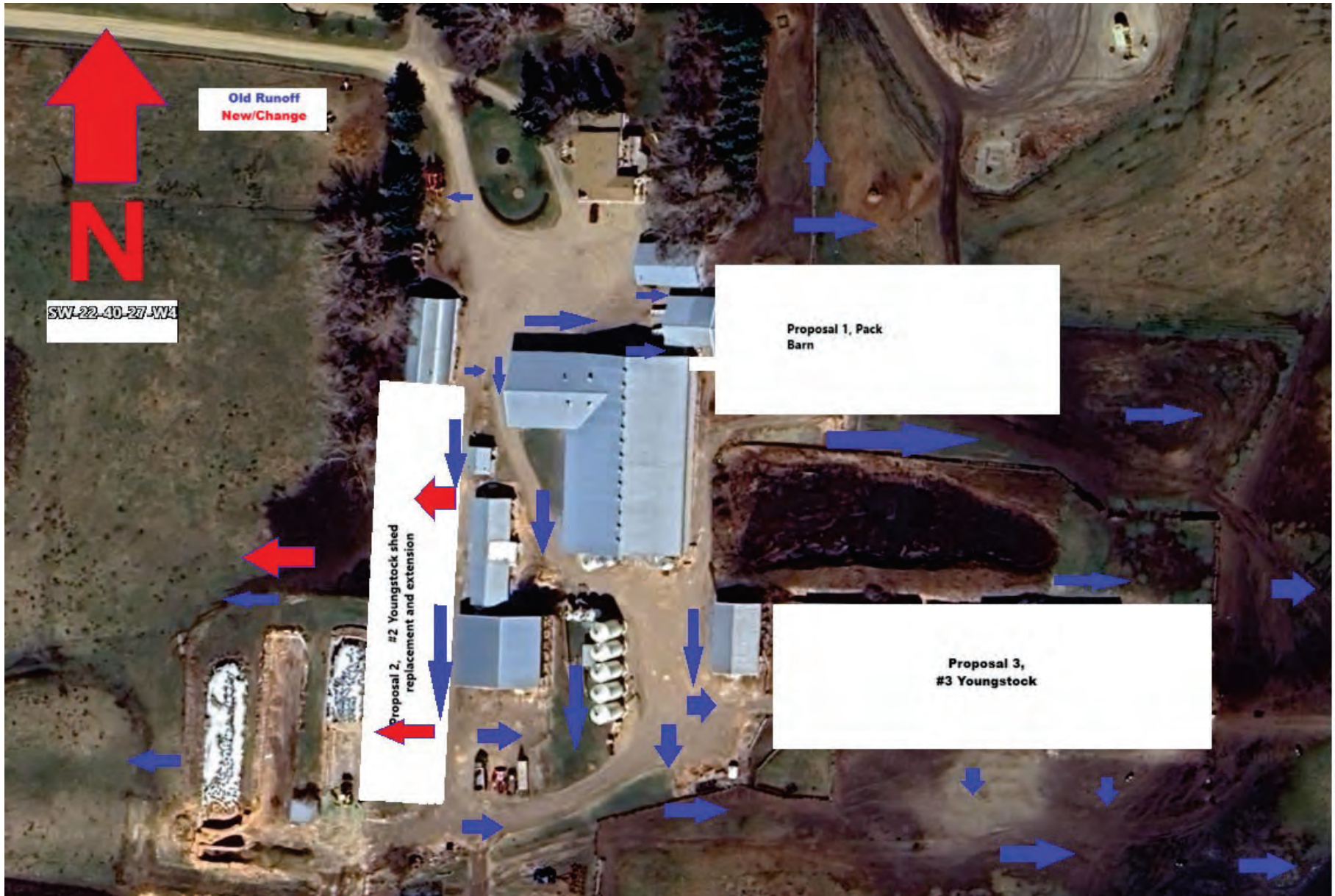
SW-22-40-27-W4

Old and Proposed #2 Youngstock are >200m East from the center of the road

Proposal 2, #2 Youngstock shed replacement and extension

Proposal 1, Pack Barn

Proposal 3, #3 Youngstock



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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
Kassies Dairy	NW-15-40-27-W4	470m					
Reuben Krazy (Krazy Family Farm)	SE-21-40-27-W4	620m					
Kassies Dairy	NE-16-40-27-W4	440m					

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)
Thornspyc Dairy	SW-22-40-27-W4	60	Black		
	SE-22-40-27-W4	58	Black		
	NE-30-39-27-W4	44.5	Black		
Kevin Debuik	SE-09-40-27-W4	41	Black		
Duane Fairhurst	NW-20-39-27-W4	53	Black		
Garry Devnes	SW-09-40-27-W4	52	Black		
	NW-33-39-27-W4	44.5	Black		
		<u>353</u>	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)



Land Application Agreement for Receiving Manure from Thornspyc Dairy Ltd. on Cropland

The undersigned landowner agrees to allow manure from Thornspyc Dairy Ltd. to be spread on 130 acres of his/her land. The land is located in the SW one quarter of Section 09, in 40 Township, of 27 County. The undersigned landowner is the holder of Permit Number (none).

If the land indicated above received manure from livestock in addition to that from Thornspyc Dairy Ltd., please list the number and types of livestock below (if none, please indicate none):

[Redacted Signature]

Signature of Landowner

This Agreement is Good Until End of Lease

Garry de Vries
Name of Landowner

[Redacted Phone Number]

Phone Number

[Redacted Address]

Address

City

T4L 2N1

Postal Code

Dec 20, 2024

Date



Land Application Agreement for Receiving Manure from Thornspyc Dairy Ltd. on Cropland

The undersigned landowner agrees to allow manure from Thornspyc Dairy Ltd. to be spread on 110 acres of his/her land. The land is located in the NW one quarter of Section 33, in 39 Township, of 27 County. The undersigned landowner is the holder of Permit Number (none).

If the land indicated above received manure from livestock in addition to that from Thornspyc Dairy Ltd., please list the number and types of livestock below (if none, please indicate none):

[Redacted Signature]

Signature of Landowner

This Agreement is Good Until end of lease

Gary de Vries [Redacted Phone Number]
Name of Landowner Phone Number

[Redacted Address] Lacombe T4L 2M1 Dec 20, 2017
Address City Postal Code Date



Land Application Agreement for Receiving Manure from Thornspyc Dairy Ltd. on Cropland

The undersigned landowner agrees to allow manure from Thornspyc Dairy Ltd. to be spread on 120⁷ acres of his/her land. The land is located in the NW one quarter of Section 20, in 39 Township, of 27 County. The undersigned landowner is the holder of Permit Number (none).

If the land indicated above received manure from livestock in addition to that from Thornspyc Dairy Ltd., please list the number and types of livestock below (if none, please indicate none):

[Redacted Signature]

Signature of Landowner

This Agreement is Good Until end of land rental agreement

Duane Fairhurst

Name of Landowner

[Redacted Phone Number]

Phone Number

[Redacted Address]

Address

Bentley AB

City

T0C 1S0

Postal Code

15-Jan-2018

Date



Land Application Agreement for Receiving Manure from Thornspyc Dairy Ltd. on Cropland

The undersigned landowner agrees to allow manure from Thornspyc Dairy Ltd. to be spread on 100 acres of his/her land. The land is located in the SE one quarter of Section 09, in 40 Township, of 27.W4 County. The undersigned landowner is the holder of Permit Number (none).

If the land indicated above received manure from livestock in addition to that from Thornspyc Dairy Ltd., please list the number and types of livestock below (if none, please indicate none):

Signature of Landowner

This Agreement is Good Until END OF RENTAL AGREEMENT

K. Debuc

Name of Landowner

Phone Number

Address

LACOMBE

City

T4L-1X3

Postal Code

DEC 27/24

Date

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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. Pack Barn
 2. #2 Young Stock and #3 Youngstock

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.	110	36	<1m	
2.	125 and 125	16 and not less than 16m	<1m for both	
TOTAL CAPACITY				

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
 N/A All Facilities are enclosed

Liner protection

Describe how the physical integrity of the liner will be maintained
 Crack checking and filling

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 inches or greater as required	Method of sulphate protection: Type 50
Concrete strength 30Mpa	Concrete reinforcement size and spacing As per requirement

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: _____ Requirements met: YES NO

Depth to Uppermost groundwater resource: _____ 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.