

Technical Document LA24047



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)

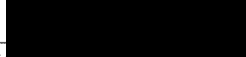
NRCB USE ONLY	Application number	Legal land description
<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Registration <input type="checkbox"/> Authorization <input type="checkbox"/> Amendment	LA24047	N½ 20 & S½ 29-17-26 W4M

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.

Date of signing: Nov 19 2024
 Signature: 
 Corporate name (if applicable): Brant Farming Co Ltd
 Print name: Leonard J Gross

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)
Chicken Broiler barn	380' x 120' (116 m x 37 m)

Existing facilities: list ALL existing confined feeding operation facilities and their dimensions		
Existing facilities	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Chicken Layer Pullet barn	120.4m x 24.1m	All existing facilities confirmed.
with attached manure collection area	18.3m x 9.1m	
Dry Sow barn	18.3m x 53.37m	

NRCB USE ONLY

AO Comment: CFO is currently permitted under Approval LA21061.

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Existing facilities continued	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Farrow and nursery barn	18.3m x 70.15m	
Grower and finisher barn	22.8m x 70.15m	
Dairy barn	127m x 24m x 4.25m	
with manure pit	4.9m x 4.9m x 2.4m	
Calf and Close up	18.3m x 70.15m	
Macdonald barn	14m x 51.8m	
EMS (Lagoon)	112.2m 50m x 3.60m deep	
Slurry Store	30.8m x 5.8m High	
Dairy dry Corrals	60m x 65m	
AO Comment: The calf and close up barn (being converted from the old dairy barn) has yet to be completed. The conditions for the conversion from Approval LA21061 are being carried forward into this approval.		

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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 one burned down so we want to build a new barn

AO Comment: The existing turkey barn burnt down and applicant has indicated they will not be rebuilding it. Instead, applicant has indicated they are proposing to build a chicken broiler barn adjacent to the footprint of the turkey barn.

Construction completion date for proposed facilities Nov 30 2028

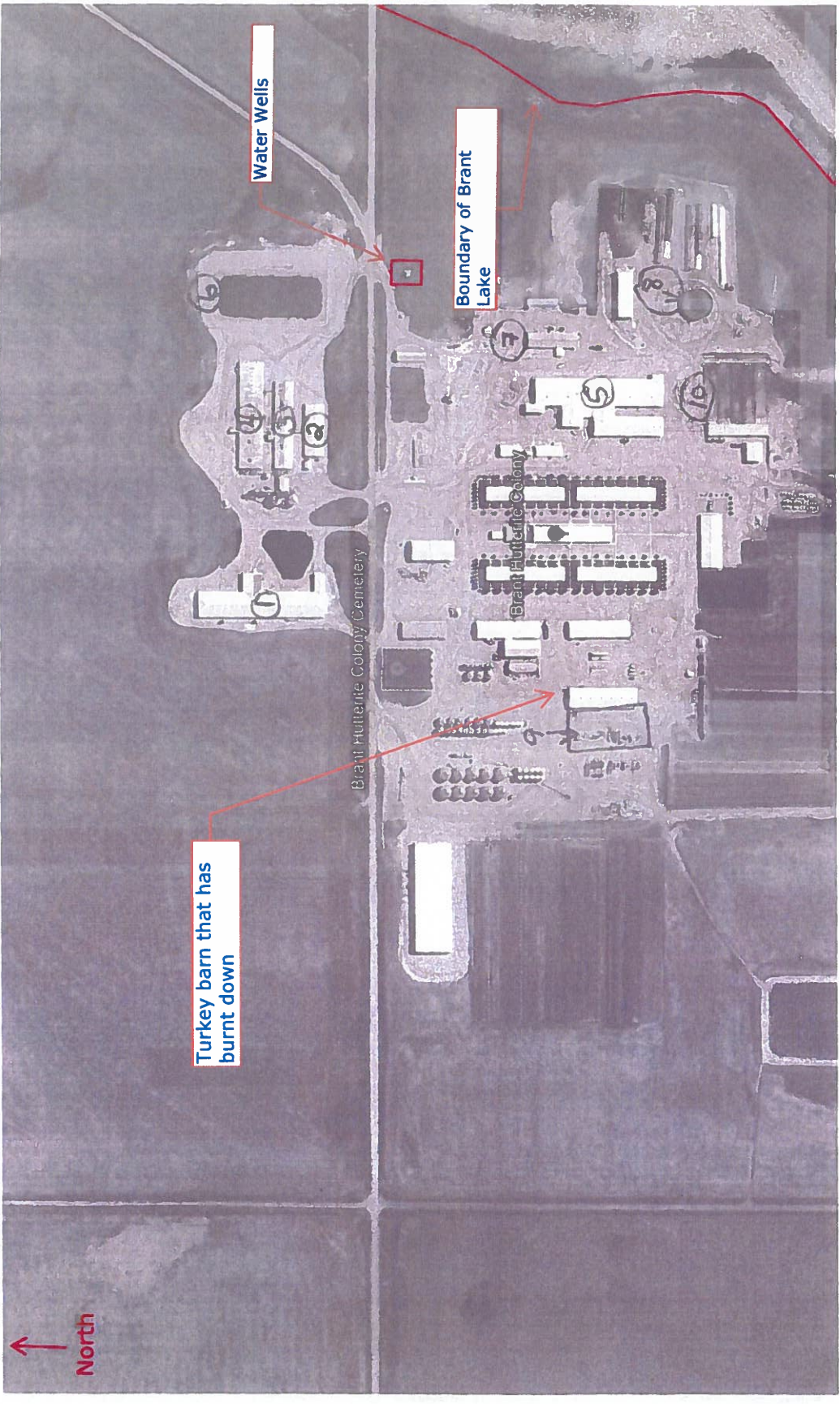
Additional information

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
Milking Cows	145	0	145
Chicken Layers	13000	0	13000
Chicken Pullets	13000	0	13000
Swine Farrow to Finish	400	0	400
Swine Feeders	3724	0	3724
Turkeys	5200	-5100	100
Ducks	700	0	700
Geese	200	0	200
Chicken Broilers	0	+40000	40000

Last updated September 11, 2023

AO Comment: Livestock numbers have not changed from Part 1 application.



↑ North

Turkey barn that has burnt down

Water Wells

Boundary of Brant Lake

Brant Hutterite Colony Cemetery

Brant Hutterite Colony

- | | | | |
|-----|---------------------------|------|----------------------------------|
| # 1 | Chicken Layer Pullet barn | # 7 | Macdonald barn |
| # 2 | Dry Sow barn | # 8 | Slurry Store |
| # 3 | Farrow and Nursery barn | # 9 | Chicken Broiler barn (proposed) |
| # 4 | Grower + Finisher barn | # 10 | Dairy dry Corvalls |
| # 5 | Dairy Barn | | Application LA24047 Page 4 of 19 |
| # 6 | Lagoon | | |

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)

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) _____

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 _____

File Number 10789

Signed this 19 day of Nov, 2024.

Signature of Applicant or Agent

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
WATER WELL AND SURFACE WATER INFORMATION

Well IDs: 1610561 131856

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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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: Lagoon

Proposed 1: Broiler barn

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 checked="" 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 known flood plain
Surface water information How many springs are within 100 m of the manure storage facility or manure collection area? How many water wells are within 100 m of the manure storage facility or manure collection area?	0	0			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	None observed on site
	1	0			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Existing lagoon is 82 m from water wells; Proposed broiler barn to be >450 m from water wells.
Groundwater information What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal) What is the depth to the water table? What is the depth to the groundwater resource/aquifer you draw water from?	350m	800m			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	Existing lagoon is 270 m from bank of Brant Lake; Proposed broiler barn to be >580 m from bank of Brant Lake.
		30m			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	> 5 m below grade
	41.15m	41.15m			<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption	UGR is 41.15 m below grade in WWID 1610561

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

AO Comment: Applicant indicated they have only two active water wells on site, ID#'s 1610561 and 131856.



Water Well Drilling Report

[View in Imperial](#) [Export to Excel](#)

GIC Well ID 1610561
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2010/01/11

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

Well Identification and Location										Measurement in Metric		
Owner Name BRANT COLONY		Address P.O. BOX 107			Town BRANT		Province ALBERTA		Country CANADA		Postal Code T0L 0L0	
Location	<i>1/4 or LSD</i>	<i>SEC</i>	<i>TWP</i>	<i>RGE</i>	<i>W of MER</i>	<i>Lot</i>	<i>Block</i>	<i>Plan</i>	<i>Additional Description</i> EAST WELL			
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)					Elevation _____ m		
_____ m from _____					Latitude <u>50.455183</u> Longitude <u>-113.539833</u>					How Elevation Obtained		
_____ m from _____					Hand held autonomous GPS 20-30m					Not Obtained		

Drilling Information	
Method of Drilling Rotary - Air	Type of Work New Well
Proposed Well Use Municipal	

Formation Log		Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description
13.41		Brown Sandy Clay & Rocks
16.76		Sand & Gravel
18.59		Gray Clay & Rocks
26.82		Gray Shale
27.13		Gray Sandstone
36.27		Gray Shale
41.15	Yes	Gray Sandstone
42.67		Gray Shale

Yield Test Summary			Measurement in Metric
Recommended Pump Rate		<u>68.19 L/min</u>	
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
2009/05/27	72.74	13.95	
2009/05/26	95.47	13.95	

Well Completion				Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
42.67 m	42.67 m	2009/05/25	2009/05/26	

Borehole		
Diameter (cm)	From (m)	To (m)
15.56	0.00	42.67

Surface Casing (if applicable)		Well Casing/Liner	
Steel	Plastic		
Size OD	<u>14.30 cm</u>	Size OD	<u>11.43 cm</u>
Wall Thickness	<u>0.559 cm</u>	Wall Thickness	<u>0.602 cm</u>
Bottom at	<u>19.81 m</u>	Top at	<u>3.05 m</u>
		Bottom at	<u>42.67 m</u>

Perforations				
		Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
From (m)	To (m)			
36.58	41.15	0.318		17.78

Perforated by **Saw**

Annular Seal	
Bentonite Chips/Tablets	
Placed from	<u>12.19 m</u> to <u>36.58 m</u>
Amount	<u>300.00 Pounds</u>

Other Seals

Type	At (m)
Drive Shoe	19.81
Shale Trap	36.58

Screen Type		
Size OD	_____ cm	
From (m)	To (m)	Slot Size (cm)

Attachment _____

Top Fittings _____ Bottom Fittings _____

Pack	
Type	_____ Grain Size _____
Amount	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well DOUG NIEMANS	Certification No 70092A
Company Name PETER NIEMANS WATER WELL DRILLING	Copy of Well report provided to owner Yes
	Date approval holder signed 2009/06/03



Water Well Drilling Report

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GIC Well ID 1610561
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 2010/01/11

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GOWN ID

Well Identification and Location										Measurement in Metric	
Owner Name BRANT COLONY		Address P.O. BOX 107			Town BRANT			Province ALBERTA		Country CANADA	Postal Code T0L 0L0
Location	1/4 or LSD 15	SEC 20	TWP 17	RGE 26	W of MER 4	Lot	Block	Plan	Additional Description EAST WELL		
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>50.455183</u> Longitude <u>-113.539833</u>					Elevation _____ m	
_____ m from _____					How Location Obtained Hand held autonomous GPS 20-30m					How Elevation Obtained Not Obtained	

Additional Information										Measurement in Metric	
Distance From Top of Casing to Ground Level		_____ 67.01 cm									
Is Artesian Flow		_____								Is Flow Control Installed _____	
Rate		_____ L/min								Describe _____	
Recommended Pump Rate		_____ 68.19 L/min								Pump Installed _____	
Recommended Pump Intake Depth (From TOC)		_____ 36.58 m								Depth _____ m	
		_____								Type _____ Make _____ H.P. _____	
		_____								Model (Output Rating) _____	
Did you Encounter Saline Water (>4000 ppm TDS)		_____		Depth _____ m		Well Disinfected Upon Completion Yes					
Remedial Action Taken		_____		Gas _____		Depth _____ m		Geophysical Log Taken _____			
		_____						Submitted to ESRD _____			
Additional Comments on Well								Sample Collected for Potability Yes		Submitted to ESRD Yes	
LITH: FROM 0' - 44 FEET ALSO SAND STRINGERS											

Contractor Certification			
Name of Journeyman responsible for drilling/construction of well DOUG NIEMANS		Certification No 70092A	
Company Name PETER NIEMANS WATER WELL DRILLING		Copy of Well report provided to owner Date approval holder signed Yes 2009/06/03	



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GOWN ID

Well Identification and Location										Measurement in Metric	
Owner Name BRANT COLONY		Address P.O. BOX 107			Town BRANT		Province ALBERTA		Country CANADA	Postal Code T0L 0L0	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description EAST WELL		
	15	20	17	26	4						
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)						
_____ m from _____					Latitude <u>50.455183</u> Longitude <u>-113.539833</u>					Elevation _____ m	
_____ m from _____					How Location Obtained Hand held autonomous GPS 20-30m					How Elevation Obtained Not Obtained	

Yield Test			Taken From Top of Casing		Measurement in Metric
Test Date	Start Time	Static Water Level	Depth to water level		
2009/05/27	11:00 AM	13.95 m	Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
Method of Water Removal			13.95	0:00	23.31
Type <u>Pump</u>			19.30	1:00	14.61
Removal Rate <u>72.74 L/min</u>			23.29	2:00	13.55
Depth Withdrawn From <u>39.62 m</u>			25.50	3:00	13.42
			26.20	4:00	13.34
			26.73	5:00	13.26
			27.02	6:00	13.19
If water removal period was < 2 hours, explain why			26.80	7:00	13.14
			26.21	8:00	13.10
			25.70	9:00	13.06
			25.27	10:00	13.02
			25.07	12:00	12.96
			24.48	14:00	12.90
			24.20	16:00	12.85
			24.14	18:00	12.78
			24.12	20:00	12.73
			24.11	25:00	12.63
			24.10	30:00	12.55
			24.09	35:00	12.48
			24.08	40:00	13.25
			24.07	50:00	13.72
			24.06	60:00	13.95
			23.64	75:00	14.16
			23.50	90:00	14.12
			23.41	105:00	14.09
			23.31	120:00	14.07

Yield Test			Taken From Top of Casing		Measurement in Metric
Test Date	Start Time	Static Water Level	Depth to water level		
2009/05/26	11:00 AM	13.95 m	Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
Method of Water Removal					
Type <u>Air</u>					
Removal Rate <u>95.47 L/min</u>					
Depth Withdrawn From <u>42.67 m</u>					
If water removal period was < 2 hours, explain why					
OPEN FLOW WITH RIG AIR FOR 2 HRS.					

Water Diverted for Drilling		
Water Source NW-21-18-28-W4	Amount Taken 4546.09 L	Diversion Date & Time 2009/05/25 10:00 AM

Contractor Certification		
Name of Journeyman responsible for drilling/construction of well DOUG NIEMANS	Certification No 70092A	
Company Name PETER NIEMANS WATER WELL DRILLING	Copy of Well report provided to owner Yes	Date approval holder signed 2009/06/03



Water Well Drilling Report

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GIC Well ID 131856
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1973/10/19

The driller supplies the data contained in this report. The Province disclaims responsibility for its accuracy. The information on this report will be retained in a public database.

GOWN ID

Well Identification and Location										Measurement in Metric		
Owner Name HUTTERIAN BROTHERS OF BRANT		Address P.O. BOX 107 BRANT			Town		Province		Country		Postal Code	
Location	1/4 or LSD	SEC	TWP	RGE	W of MER	Lot	Block	Plan	Additional Description			
	15	20	17	26	4							
Measured from Boundary of					GPS Coordinates in Decimal Degrees (NAD 83)							
_____ m from					Latitude <u>50.453605</u> Longitude <u>-113.538254</u>					Elevation <u>990.60 m</u>		
_____ m from					How Location Obtained					How Elevation Obtained		
					Map					Estimated		

Drilling Information		Type of Work	
Method of Drilling Rotary		New Well	
Proposed Well Use Stock			

Formation Log			Measurement in Metric
Depth from ground level (m)	Water Bearing	Lithology Description	
12.19		Clay & Silt	
18.29		Fine Grained Sand & Gravel	
33.53		Shale	
48.77		Hard Shale & Sandstone	

Yield Test Summary			Measurement in Metric
Recommended Pump Rate <u>0.00 L/min</u>			
Test Date	Water Removal Rate (L/min)	Static Water Level (m)	
1979/09/01	45.46	6.71	

Well Completion				Measurement in Metric
Total Depth Drilled	Finished Well Depth	Start Date	End Date	
48.77 m			1973/09/01	
Borehole				
Diameter (cm)	From (m)	To (m)		
0.00	0.00	48.77		
Surface Casing (if applicable)		Well Casing/Liner		
Steel		Steel		
Size OD <u>15.24 cm</u>		Size OD <u>12.70 cm</u>		
Wall Thickness <u>0.000 cm</u>		Wall Thickness <u>0.000 cm</u>		
Bottom at <u>21.34 m</u>		Top at <u>0.00 m</u>		
		Bottom at <u>48.77 m</u>		
Perforations				
From (m)	To (m)	Diameter or Slot Width (cm)	Slot Length (cm)	Hole or Slot Interval (cm)
36.58	48.77	0.000		0.00
Perforated by <u>Unknown</u>				
Annular Seal Driven				
Placed from <u>0.00 m</u> to <u>0.00 m</u>				
Amount _____				
Other Seals				
Type				At (m)
Screen Type				
Size OD <u>0.00 cm</u>				
From (m)	To (m)	Slot Size (cm)		
Attachment _____				
Top Fittings _____		Bottom Fittings _____		
Pack				
Type _____		Grain Size _____		
Amount _____				

Contractor Certification		Certification No	
Name of Journeyman responsible for drilling/construction of well		1	
UNKNOWN NA DRILLER		Copy of Well report provided to owner Date approval holder signed	
Company Name			
TRANS PROVINCIAL DRILLING LTD.			



Water Well Drilling Report

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GIC Well ID 131856
GoA Well Tag No.
Drilling Company Well ID
Date Report Received 1973/10/19

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GOWN ID

Well Identification and Location										Measurement in Metric	
Owner Name HUTTERIAN BRETHREN OF BRANT	Address P.O. BOX 107 BRANT			Town		Province		Country		Postal Code	
Location	1/4 or LSD 15	SEC 20	TWP 17	RGE 26	W of MER 4	Lot	Block	Plan	Additional Description		
Measured from Boundary of				GPS Coordinates in Decimal Degrees (NAD 83)				Elevation			
_____ m from				Latitude <u>50.453605</u> Longitude <u>-113.538254</u>				_____ 990.60 m			
_____ m from				How Location Obtained				How Elevation Obtained			
_____				Map				Estimated			
Additional Information										Measurement in Metric	
Distance From Top of Casing to Ground Level _____ cm											
Is Artesian Flow					Is Flow Control Installed						
Rate _____ L/min					Describe _____						
Recommended Pump Rate _____ 0.00 L/min					Pump Installed _____		Depth _____ m				
Recommended Pump Intake Depth (From TOC) _____ 0.00 m					Type _____		Make _____		H.P. _____		
					Model (Output Rating) _____						
Did you Encounter Saline Water (>4000 ppm TDS) _____				Depth _____ m		Well Disinfected Upon Completion _____					
Gas _____				Depth _____ m		Geophysical Log Taken _____					
Remedial Action Taken				Submitted to ESRD							
				Sample Collected for Potability _____		Submitted to ESRD <u>Yes</u>					
Additional Comments on Well											

Yield Test			Taken From Ground Level		Measurement in Metric
Test Date	Start Time	Static Water Level	Depth to water level		
1979/09/01	12:00 AM	6.71 m	Pumping (m)	Elapsed Time Minutes:Sec	Recovery (m)
Method of Water Removal					
Type _____					
Removal Rate <u>45.46</u> L/min					
Depth Withdrawn From <u>0.00</u> m					
If water removal period was < 2 hours, explain why					

Water Diverted for Drilling		
Water Source	Amount Taken	Diversion Date & Time
	L	

Contractor Certification	
Name of Journeyman responsible for drilling/construction of well UNKNOWN NA DRILLER	Certification No 1
Company Name TRANS PROVINCIAL DRILLING LTD.	Copy of Well report provided to owner Date approval holder signed

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
ENVIRONMENTAL RISK SCREENING INFORMATION

ERST for proposed facilities

Facility	Groundwater score	Surface water score	File number
Chicken Broiler Barn	Low	Low	LA24047

ERST for existing facilities

Facility	Groundwater score	Surface water score	File number
Dairy Barn	Low	Low	LA21061
Layer/Pullet Barn	Low	Low	LA14027
Hog Barn	Low	Low	LA14027
EMS	Low	Low	LA14027
Calf and Close-up Barn	Low	Low	LA14027
Duck/Goose Barn	Low	Low	LA14027
Dry Cow Shelter	Low	Low	LA14027
Slurry Tank	Low	Low	LA14027

ERST related comments:

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)

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

Neighbour name(s)	Legal land description	Distance (m)	NRCB USE ONLY				Meets regulations
			Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	
D. McDonald	NW-30-17-26-4	2415	RG	1	2,455	N/A	Yes
T. Irwin	NE-16-17-26-4	2818	RG	1	3,073	N/A	Yes
River Cross Ranch	SW-19-17-26-4	2415	RG	1	2,095	N/A	Yes
Steve & Lind Fink	NW-22-17-26-4	2818	RG	1	2,771	N/A	Yes
Rod Dixon	NW-08-17-26-4	3218	RG	1	3,008	N/A	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)
H.B. of Brant	Sec 29-17-26-4	580	Dark Brown	Unusable areas already accounted for	N/A
H.B. of Brant	NE-30-17-26-4	160	Dark Brown		
H.B. of Brant	E 1/2-32-17-26-4	320	Dark Brown		
H.B. of Brant	E 1/2-33-17-26-4	320	Dark Brown		
H.B. of Brant	W 1/2-34-17-26-4	320	Dark Brown		
Total				2,654 acres including lands on next page	

* 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)

AO Comment: Land zoned "Rural General" (RG) is the same as agriculture zoned land.

AO Comment: Land base listed by applicant is in acres.

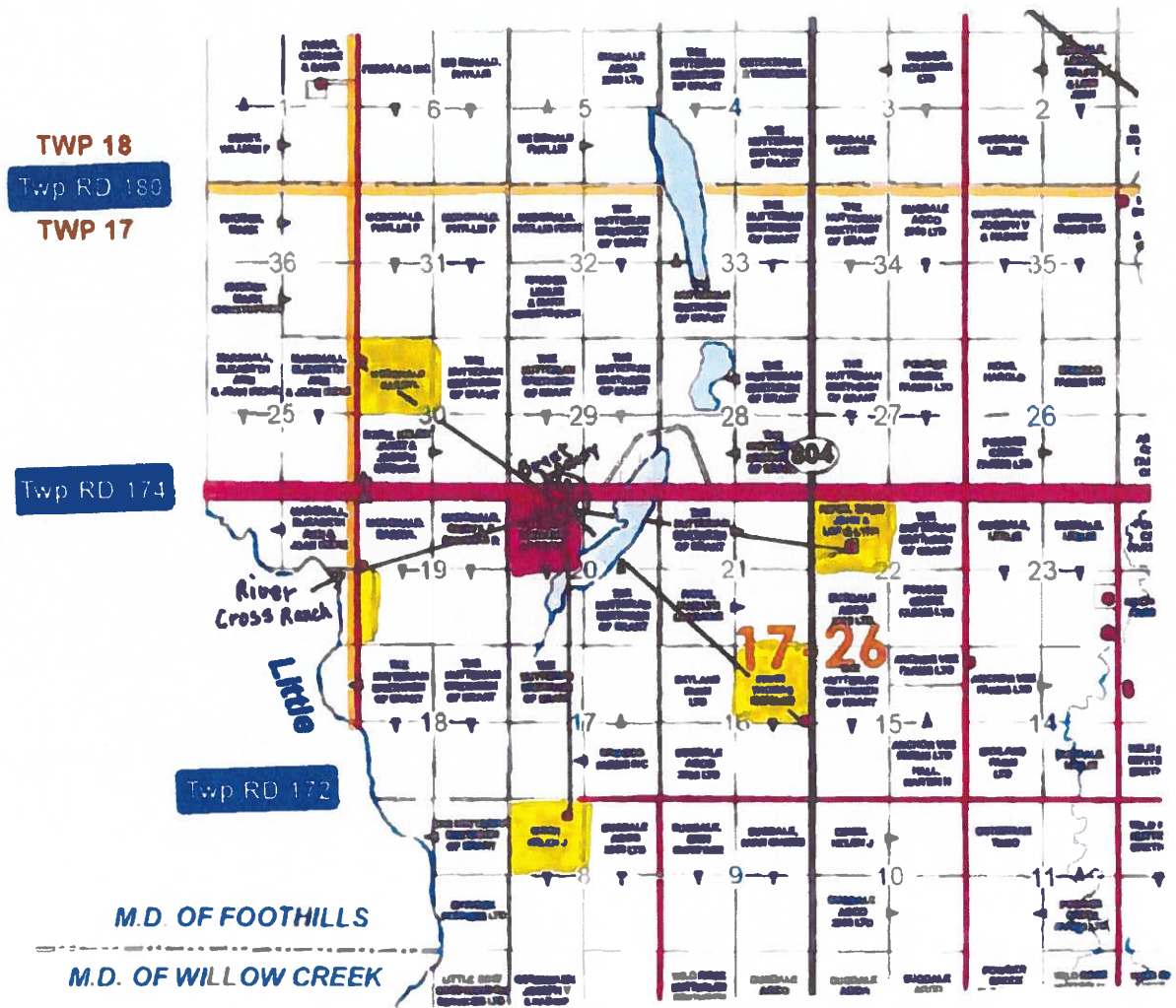
Land Base For Manure Application Cont.

W $\frac{1}{2}$ -27-17-26-W4 = 320 acres.

NE-22-17-26-W4 = 160 acres

NW-4-18-26-W4 = 160 acres

N 1/2 21-17-26 W4 = 314 acres



M.D. OF FOOTHILLS
M.D. OF WILLOW CREEK



To Neighbouring Residences

- D. McDonald = 2,415 m.
- T. Irwin = 2,818 m.
- River Cross Ranch = 2,415 m.
- Steve & Linda Fink = 2,818 m.
- ~~Helen J. Dixon~~ = 3,218 m.

Rod

Name **Brent Farming Co Ltd**
 Address **[REDACTED]**
 Legal Land **[REDACTED]**
 Location **[REDACTED]**

MDS Spreadsheet based on 2006 AOPA Regulations

Category of Livestock	Type of Livestock	Factor A	Technology Factor	MU	LSU Factor	LSU
Feedlot Animals	Beef Cows/Finishers (900+ lbs)	0.700	0.700	0.910	0.4459	-
	Beef Feeders (450 - 900 lbs)	0.700	0.700	0.500	0.2450	-
	Beef Feeder Calves (<550 lbs)	0.700	0.700	0.275	0.1348	-
	Horses - PMU	0.650	0.700	1.000	0.4550	-
	Horses - Feeders > 750 lbs	0.650	0.700	1.000	0.4550	-
	Horses - Foals < 750 lbs	0.650	0.700	0.300	0.1365	-
	Mules	0.600	0.700	1.000	0.4200	-
	Dankeys	0.600	0.700	0.670	0.2814	-
	Bison	0.600	0.700	1.000	0.4200	-
	Dairy (*count lactating cows only)	Free Stall - Lactating Cows with all associated dries, heifers, and calves*	0.800	1.100	2.000	1.7600
	Free Stall - Lactating Cows with Dry Cows only*	0.800	1.100	1.640	1.4432	-
	Free Stall - Lactating Cows only	0.800	1.100	1.400	1.2320	-
	Tie Stall - Lactating Cows only	0.800	1.000	1.400	1.1200	-
	Loose Housing - Lactating Cows only	0.800	1.000	1.400	1.1200	-
	Dry Cow	0.800	0.700	1.000	0.5600	-
	Replacements - Bred Heifers (Breeding to Calving)	0.800	0.700	0.875	0.4900	-
	Replacements - Growing Heifers (350 lbs to breeding)	0.800	0.700	0.525	0.2940	-
	Calves (< 350 lbs)	0.800	0.700	0.200	0.1120	-
Swine Liquid (*count sows only)	Farrow to finish *	2.000	1.100	1.780	3.9160	1,566.4
	Farrow to wean *	2.000	1.100	0.670	1.4740	-
	Farrow only *	2.000	1.100	0.530	1.1660	-
	Feeders/Boars	2.000	1.100	0.200	0.4400	1,638.6
	Growers/Roasters	2.000	1.100	0.118	0.2600	-
	Weaners	2.000	1.100	0.055	0.1210	-
Swine Solid (*Count sows only)	Farrow to finish *	2.000	0.800	1.780	2.8480	-
	Farrow to wean *	2.000	0.800	0.670	1.0720	-
	Farrow only *	2.000	0.800	0.530	0.8480	-
	Feeders/Boars	2.000	0.800	0.200	0.3200	-
	Growers/Roasters	2.000	0.800	0.118	0.1888	-
	Weaners	2.000	0.800	0.055	0.0880	-
Poultry	Chicken - Breeders - Solid	1.000	0.700	0.010	0.0070	-
	Chicken - Layers - Liquid (includes associated pullets)	2.000	1.100	0.008	0.0176	-
	Chicken - Layers - (Belt Cage)	2.000	0.700	0.008	0.0112	145.6
	Chicken - Layers - (Deep Pit)	2.000	0.700	0.008	0.0112	-
	Chicken - Pullets/Broilers	1.000	0.700	0.002	0.0014	74.2
	Turkey - Toms/Breeders	1.000	0.700	0.020	0.0140	-
	Turkey - Hens (light)	1.000	0.700	0.013	0.0091	-
	Turkey - Broilers	1.000	0.700	0.010	0.0070	0.7
	Ducks	1.000	0.700	0.010	0.0070	4.9
	Geese	1.000	0.700	0.020	0.0140	2.8
Sheep and Goats	Sheep - Ewes/Rams	0.600	0.700	0.200	0.0840	-
	Sheep - Ewes with lambs	0.600	0.700	0.250	0.1050	-
	Sheep - Lambs	0.600	0.700	0.050	0.0210	-
	Sheep - Feeders	0.600	0.700	0.100	0.0420	-
	Goats - Meat/Milk (per Ewe)	0.700	0.700	0.170	0.0833	-
	Goats - Nannies/Billies	0.700	0.700	0.140	0.0686	-
	Goats - Feeders	0.700	0.700	0.077	0.0377	-
Cervid	Elk	0.600	0.700	0.600	0.2520	-
	Deer	0.600	0.700	0.200	0.0840	-
Wild Boar	Feeders	2.000	0.800	0.140	0.2240	-
	Sow (farrowing)	2.000	0.800	0.371	0.5936	-
Total						3,688.4

For New Operations

Dispersion Factor **1**

Category	Odour Objective	Distance	
		Feet	Metres
1	41.04	2,698	822
2	54.72	3,598	1,097
3	68.4	4,497	1,371
4	109.44	7,195	2,193

For Expanding Operations

Dispersion Factor **1**
 Expansion Factor **0.77**

Category	Odour Objective	Distance	
		Feet	Metres
1	41.04	2,078	633
2	54.72	2,770	844
3	68.40	3,463	1,055
4	109.44	5,540	1,689

Name Brant Farming Co Ltd
 Address 0
 Legal Land
 Location 0

Landbase Requirements (hectares) based on 2006 AOPA requirements

Category of Livestock	Type of Livestock	Number of Animals	Dark Brown & Brown (ha)	Grey Wooded (ha)	Black (ha)	Irrigated (ha)
Feedlot Animals	Cows/Finishers (900+ lbs)	0.0	0.0	0.0	0.0	0.0
	Feeders (450 - 900 lbs)	0.0	0.0	0.0	0.0	0.0
	Feeder Calves (<550 lbs)	0.0	0.0	0.0	0.0	0.0
	Horses - PMU	0.0	0.0	0.0	0.0	0.0
	Horses - Feeders > 750 lbs	0.0	0.0	0.0	0.0	0.0
	Horses - Foals < 750 lbs	0.0	0.0	0.0	0.0	0.0
	Mules	0.0	0.0	0.0	0.0	0.0
	Donkeys	0.0	0.0	0.0	0.0	0.0
	Bison	0.0	0.0	0.0	0.0	0.0
			0.0			
Dairy (*count lactating cows only)	Free Stall - Lactating Cows with all associated dries, heifers, and calves*	145.0	215.3	179.4	134.8	107.8
	Free Stall - Lactating Cows with Dry Cows only *	0.0	0.0	0.0	0.0	0.0
	Free Stall - Lactating Cows only*	0.0	0.0	0.0	0.0	0.0
	Tie Stall - Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Loose Housing - Lactating Cows only	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Solid manure)	0.0	0.0	0.0	0.0	0.0
	Dry Cow (Liquid manure)	0.0	0.0	0.0	0.0	0.0
	Replacements - Bred Heifers (Breeding to Calving)	0.0	0.0	0.0	0.0	0.0
	Replacements - Growing Heifers (350 lbs to breeding)	0.0	0.0	0.0	0.0	0.0
	Calves (< 350 lbs)	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Liquid (*count sows only)	Farrow to finish *	400.0	287.4	222.8	167.1	133.7
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	3724.0	268.1	223.4	167.8	134.1
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Swine Solid (*Count sows only)	Farrow to finish *	0.0	0.0	0.0	0.0	0.0
	Farrow to wean *	0.0	0.0	0.0	0.0	0.0
	Farrow only *	0.0	0.0	0.0	0.0	0.0
	Feeders/Boars	0.0	0.0	0.0	0.0	0.0
	Growers/Roasters	0.0	0.0	0.0	0.0	0.0
	Weaners	0.0	0.0	0.0	0.0	0.0
		0.0				
Poultry	Chicken - Breeders - Solid	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - Liquid (includes associated pullets)	0.0	0.0	0.0	0.0	0.0
	Chicken - Layers - (Belt Cage)	13000.0	71.5	59.8	44.2	36.4
	Chicken - Layers - (Deep Pit)	0.0	0.0	0.0	0.0	0.0
	Chicken - Pullets/Broilers	53000.0	172.3	143.8	107.8	86.4
	Turkey - Toms/Breeders	0.0	0.0	0.0	0.0	0.0
	Turkey - Hens (light)	0.0	0.0	0.0	0.0	0.0
	Turkey - Broilers	100.0	0.5	0.4	0.3	0.3
	Ducks	700.0	1.1	0.9	0.7	0.6
	Geese	200.0	0.6	0.5	0.4	0.3
		0.0				
Goats and Sheep	Sheep - Ewes/Rams	0.0	0.0	0.0	0.0	0.0
	Sheep - Ewes with lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Lambs	0.0	0.0	0.0	0.0	0.0
	Sheep - Feeders	0.0	0.0	0.0	0.0	0.0
	Goats - Meat/Milk (per Ewe)	0.0	0.0	0.0	0.0	0.0
	Goats - Nannies/Billies	0.0	0.0	0.0	0.0	0.0
	Goats - Feeders	0.0	0.0	0.0	0.0	0.0
		0.0				
Cervid	Elk	0.0	0.0	0.0	0.0	0.0
	Deer	0.0	0.0	0.0	0.0	0.0
		0.0				
Wild Boar	Feeders	0.0	0.0	0.0	0.0	0.0
	Sow (farrowing)	0.0	0.0	0.0	0.0	0.0
		0.0				
Total Hectares			997	830.9	622.5	499.3
Total Acres			2,463	2053.2	1538.1	1233.7

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

MINIMUM DISTANCE SEPARATION

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

Margin of error (if applicable): +/- 5 m

Requirements (m): Category 1: 822 Category 2: 1,097 Category 3: 1,371 Category 4: 2,193

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: 2,463 acres dark brown

Land base listed: 2,654 acres dark brown

Area not suitable: Already accounted for

Available area: 2,654 acres dark brown

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 LA02004

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)

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. Chicken Broiler barn
2. _____

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.	116m	37m		
2.				
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
Barn is under roof No runoff

Liner protection

Describe how the physical integrity of the liner will be maintained
Seal crack with Sikaflex

NRCB USE ONLY

Requirements met: YES NO

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)

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

Concrete liner details

Concrete thickness 6 inches	Method of sulphate protection: Type 50
Concrete strength 30 mpa	Concrete reinforcement size and spacing 10mm rebar on 12" spacing
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: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Condition required: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Report attached: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

Additional information (attach as required)

NRCB USE ONLY	
Nine month manure storage volume requirements met <input type="checkbox"/> YES <input checked="" type="checkbox"/> YES With STMS <input type="checkbox"/> NO	
Depth to water table: <u>>5 m below grade</u>	Requirements met: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Depth to Uppermost groundwater resource: <u>41.15 m below grade</u>	Requirements met: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ERST completed: <input checked="" type="checkbox"/> see ERST page for details	
Surface water control systems	
Requirements met: <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Details/comments:
Concrete liner details	
A condition is included in this permit requiring the applicant to provide proof that the concrete will meet the specifications for category D (solid manure - dry) as outlined in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas".	
Leakage detection system required: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If yes, please explain why.	

Last updated February 26, 2021

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

ALL SIGNATURES IN FILE

YES NO

DATES OF APPROVAL OFFICER SITE VISITS

November 19, 2024	

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: January 15, 2025

Municipality: Vulcan 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: Sunshine Gas Coop Ltd., Ranahan Resources Ltd. N/A

letter sent response received written/email verbal no comments received

Other: Foothills County N/A

letter sent response received written/email verbal no comments received