Technical Document RA25033

Part 2 — Technical Requirements



NRCB USE ONLY	Application number	Legal	and description		
☐ Approval ☐ Registration ☑ Authorization	RA25033	NE 22	2-42-25 W4M		
Amendment					
APPLICATION DISCLOSURE					
This information is collected under the authority of the <i>Agric</i> provisions of the <i>Freedom of Information and Protection of F</i> written request that certain sections remain private.					
Any construction prior to obtaining an NRCB permit is prosecution.	an offence and is subject to	enforcement	action, including		
	4		the information)N		
I, the applicant, or applicant's agent, have read and understand provided in this application is true to the best of my knowledge	d the statements above and ack 	nowledge that	the information		
Date of signing t	Signature		,		
June 7 2025	SIDKE DI	INSTRA	Q		
Corporate name (if applicable)	Print name	JASTA			
GENERAL INFORMATION REQUIREMENTS					
Proposed facilities: list all proposed confined feeding ope		sions. Indicate	whether any of the		
proposed facilities are additions to existing facilities. (attac	ch additional pages if needed)		Pimensions (m)		
Proposed facilities			(length, width, and depth)		
(116' x 100') Dairy barn addition		35	5.4 m x 30.5 m		
	(plus pit, 35.3 m x 4.87 n	x 2.4 m d	eep)		
Existing facilities: list ALL existing confined feeding oper	ration facilities and their dimensi	ons			
Existing facilities	Dimensions (length, width, a		NRCB USE ONLY		
Lagoon (227' x 133')	69.4 m x 40).5 m	Confirmed permitted		
Dairy Barn (milk cows) (115' x 120') + parlour	35.0 m x 36	3.6 m	CFO		
Calf Barn (back 1/2 of shop) (40' x 40')	12.2 mx 12	2.2 m			
NRCB USE ONLY					



Existing facilities continued	Dimensions (m) (length, width, and depth)	NRCB USE ONLY
Extend Calf Barn (50' x 40')	15.2 m x 12.2 m	
Dry cow and Fresh cow barn (210' x 90')	64.0 m x 27.4 m	
Addition to dry cow and fresh cow barn (2011) (35' x 24')	10.7 m x 7.3 m	
Heifer barn (216' x 68')	72 m x 22.7 m	



■ N/A

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

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

AO Note: In conversation with the applicant, the proposed addition is to better accommodate the existing cow herd, as well as allow for increase in space requirements. New space will include some stalls as well as some bedding area.							
Application does not seek to increase p	ermitted livestock nu	umbers					
	November 2025						
Construction completion date for proposed facility Additional information	ties						
Please reference Application RA25033							
Livestock numbers: Complete only if livestock numl livestock numbers increase in your Part 2 application, 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				
No proposed shapped to permitt	nd livestock number						
No proposed changes to permitt	ed livestock number	5					
	I	1					



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

OP	TION 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.
Sigr	ned thisday of, 20
<u>OP</u>	TION 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 <i>Water Act</i> .
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 <i>Water Act</i> licence will not be relevant to EPA's consideration of whether to grant the <i>Water Act</i> licence application.
5.	I (we) acknowledge that any such construction or livestock populating will be at the CFO's sole risk if the <i>Water Act</i> licence application is denied or if the operation of the CFO is otherwise deemed to be in violation of the <i>Water Act</i> . 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 <i>Water Act</i>).
	AS RELEVANT: I (we) acknowledge that the CFO is located in the South Saskatchewan River Basin and that, pursuant to the <i>Bow, Oldman and South Saskatchewan River Basin Water Allocation Order</i> [Alta. Reg. 171/2007], this basin is currently closed to new surface water allocations.
	Provide: Water licence application number(s)
Sigr	ned this day of, 20 Signature of Applicant or Agent
OP	TION 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
Sig	ned this 7 day of June , 20 <u>75</u> .



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

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*).

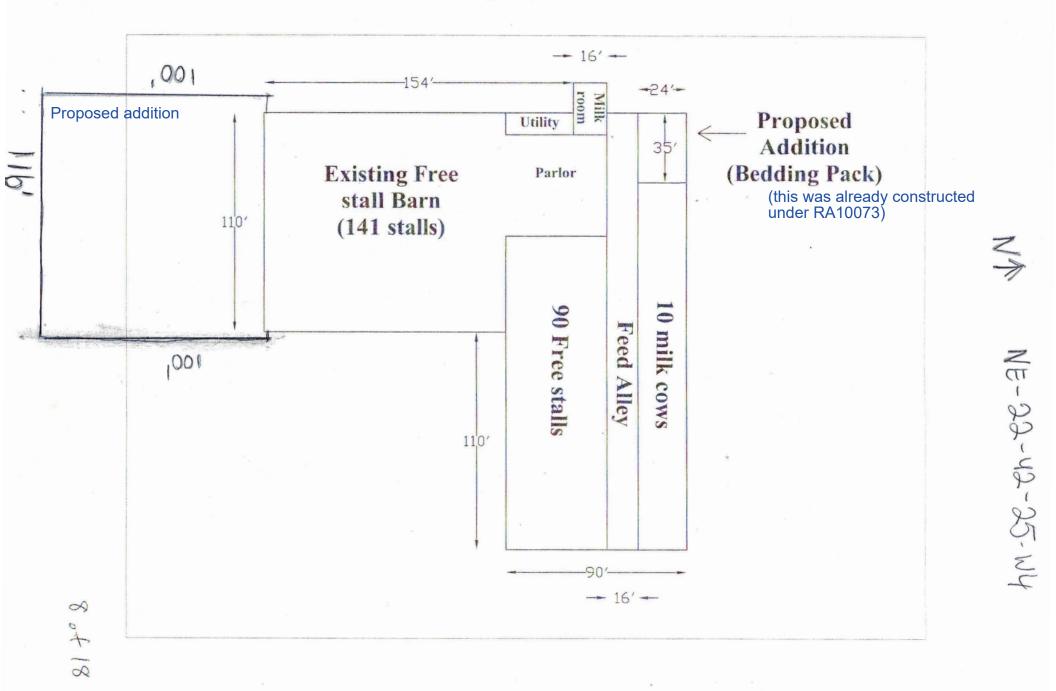
Signed this	day of	, 20	
			Signature of Applicant or Agent

NE-22-42 = 25 W4

Page 6 of 11 RA25033 TD Page 6 of 15

Barn Layout showing animal numbers and proposed bedding pack location

5





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

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: Sylvanside Dairy Ltd				Proposed 1: addition to milk cow barn				
Proposed	l 2:			Proposed 3:				
Facili	y and environmental risk		Faci	lities		NRCB USE ONLY		
	information	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?	■ >1 m □ ≤ 1 m	■ >1 m □ ≤1 m	□ >1 m □ ≤1 m	☐ > 1 m ☐ ≤ 1 m	YES NO YES with exemption	Confirmed not in flood plain	
er n	How many springs are within 100 m of the manure storage facility or manure collection area?	0	0			YES NO YES with exemption	Confirmed on site visit	
Surface water information	How many water wells are within 100 m of the manure storage facility or manure collection area?	2	0			YES NO YES with exemption	No wells within 100 m of proposed	
Su	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	500 m	500			YES NO YES with exemption	Neighbouring dugout approx 310 m SE	
lwater	What is the depth to the water table?	> 2.4 m	>2.4m			YES NO YES with exemption	No evidence of shallow WT. Estim > 5 m as no signs of it in EMS.	
Groundwater	What is the depth to the groundwater resource/aquifer you draw water from?	21.3 m	21.3 m			YES NO YES with exemption	UGR 18.3 m in WW 150556	

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



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

				NRCB USE ONL	.Y			
Neighbour name(s)	Legal land description	Distance (m)	Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	Meets regulations	
Helen McCaughey	NW-22-42-25-W4	> 700 m	Ag	1	825 m		Yes	
Von Kowalchack	ptSW-27-42-25-W4	>400 m	C.R.	2	447 m	Yes	, see note b	elov
Dennis and Antoinette Ruter	ptNW-23-42-25-W4	> 900 m	Ag	1	1005 m		Yes	
Greg and Sharon Thalen	ptSW-27-42-25-W4	> 500 m	Ag	1	538 m		Yes	
Ken and Shari Groot	ptSW-22-42-25-W4	> 900 m	Ag	1	1014 m		Yes	

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

		NRCB US	E ONLY		
Name of land owner(s)*	Legal land description	Usable area** (ha)	Soil zone ***	Usable area (ha)	Agreement attached (if required)
N/A for authorizations					

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

Additional information (attach any additional information as required)

*Under AOPA's Standards and Administration Regulation 3 (5)(c), if an applicant is applying to expand an existing building, but the total amount of manure produced annually is not increasing, then MDS does not apply. This is the case for RA25033. I note that the proposed barn addition is located farther away from this residence than the existing CFO facilities.

^{**} 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



Facility	Groundwater score	Surface water score	File number
arn addition	Low	Low	RA25033
arr addition	2011	Low	1 1 1 2 3 3 3
for <u>existing</u> facilities			
Facility	Groundwater score	Surface water score	File number
Heifer barn	Low	Low	RA18034
Maternity barn	Low	Low	RA18034
EMS	Low	Low	RA15048
West calf shed and pen	Low	Low	RA15048
II other facilities were pres	sumed lower risk tha	n the EMS and west	calf shed and pen, see
related comments:			



NRCB USE ONLY WATER WEL		WATER INFORMAT	ION						
Well IDs:	94050	120067	0						
		rectly affected parties or re		☐ YES NO					
Groundwater related concerns from directly affected parties or referral agencies:									
Water wells	N/A								
		ance requirements applied:	☐ YES ☐ NO Condition	n required: YES NO					
Surface water									
If applicable, exe	mption for 30 m dista	nce requirements applied:	L YES L NO	required: YES NO					
Water Well Exe	mption Screening To	ool N/A							
Wate	er Well ID	Preliminary Screening	Secondary Screening	Facility					
Wate	or well 15	Score	Score	racincy					
Groundwater or	surface water relat	ted comments:							



NRCB USE ONLY				
MINIMUM DISTANCE SEPARATIO				
Methods used to determine distance (if applic	cable): _	Aerial _I	ohotogra	aphy
Margin of error (if applicable): +/- 2 III				
Requirements (m): Category 1: 384 m	Cat	egory 2:	512 m	Category 3: 640 m Category 4: 1024
Technology factor:				☐ YES 💢 NO
Expansion factor:				☐ YES 🔀 NO
MDS related concerns from directly affected p	parties or	r referra	l agencies:	YES X NO
LAND BASE FOR MANURE AND CO		_	PLICATI	ION
Land base required:		10113		
Land base listed:				
Area not suitable:				
Available area			F	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:		X YES] N/A
If already completed, see RA10073				



NRCB USE ONLY							
ALL SIGNATURES	IN FILE	YES 🗆 NO					
DATES OF APPROV	AL OFFICER SITE V	ISITS					
August 1, 2025							
CORRESPONDENCI	E WITH MUNICIPAL	ITIES AND I	REFERRAL A	AGENCI	IES		
Date deeming letters sent: July 22, 2025							
Municipality: Pond				_			
	response received	written/em	nail 🔲	verbal	no comments receiv	/ed	
Alberta Health Service	s: N/A						
☐ letter sent	☐ response received	□ written/em	nail 🔲	verbal	no comments receiv	red	
Alberta Environment a	nd Parks:						
letter sent	response received	□ written/em	nail 🔲	verbal	no comments receiv	ved	
Alberta Transportation	: DKN/A						
☐ letter sent	response received	☐ written/em	nail 🔲	verbal	no comments receiv	ved .	
Alberta Regulatory Ser	vices:						
letter sent	response received	written/em	nail 🔲	verbal	no comments receiv	ved .	
Other: Atco Gas	and Pipeline, Lynx	Energy		Г] n/a		
					_		
etter sent	response received	☐ written/em	nail 📙	verbal	no comments receiv	/ed	
Other:Battle F	River Power Coop				□ N/A		
letter sent	response received	written/em	nail 🔲	verbal	☐ no comments receiv	/ed	



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

LIQUID MANURE COLLECTION AND/OR STORAGE: In-barn - Concrete liner

(complete a copy of this section for **EACH** proposed in-barn liquid manure storage facility with a concrete liner)

Facility description / name (as indicated on site plan)	1. Sylvanside Dairy Barn addition (pit)
	Barn addition

2.

3._____

Manure storage capacity (use one row in the table for EACH in-barn storage. Attach additional pages if you require more rows)

	Length (m)	Width (m)	Total depth (m)	Depth below ground level (m)	NRCB USE ONLY Calculated storage capacity (m³)
1.	35.3	4.87	2.4	2.4	412 cubic metres
2.	35.4 m	30.5 m	0	0	0
3.					
TOTAL CAPACITY					412 cubic metres

412 cubic metres

Concrete liner details

Concrete liner details	1			
	Concrete thickness 6"		Method of sulphate protection Tide 50, with sulphate resistant	
Scrape alleys or unslatted portions of barn floors (if applicable)	Concrete strength 32 MPA		Concrete reinforcement size and spacing 10 MM rebar at 18" grid	
	Constant this large		Mathada Saylala	
	Concrete thickness 6"		Method of sulphate protection Tide 50 with sulphate resistant	
In-barn manure pit floors	Concrete strength 32" MPA		Concrete reinforcement size and spacing 15 MM rebar at 18" grid	
In-barn manure pit	Concrete thickness 8"		Method of sulphate protection Tide 50 with sulphate resistant	
walls			orcement size	Vertical reinforcement size and spacing 15 MM 3 ft center



LIQUID MANURE COLLECTION AND/OR STORAG	iE: In-barn - Concrete liner (cont.)			
Describe how the joints at the junction of the pit walls, pit floors and any other joints will be sealed ruberized water stop transition wet placed into footing on floor and poured in to wall				
Describe sealing practices for piping, etc. that penetrates the line clay	er			
Concrete requirements can be found in Technical Guideline Agdex 096-93 Guideline minimums:	NRCB USE ONLY			
Solid manure: 25MPa (D) Solid manure (wet): 30MPa (C) Liquid manure: 32MPa (B)	Requirements met: YES NO			
Category A is required to be engineered Method of sulphate protection: Type 50 or Type 10 with fly ash or equivalent	Condition required: X YES NO			
Additional information				
NRCB USE ONLY				
Liquid manure storage volume calculator attached: YES N	10			
Depth to water table: > 5 m	Requirements met: XYES NO			
Depth to uppermost groundwater resource: 18.3 m	Requirements met: X YES NO			
ERST completed: see ERST page for details				
and a completed and a control page for actuals				
Concrete liner requirements				
Leakage detection system required:	NO If yes, please explain why			