Technical Document RA24013

Part 2 — Technical Requirements



NRCB USE ONLY	Application number		d description
☐ Approval ☐ Registration ☒ Authorization	RA24013	Sec. 12	-39-19 W4M
		5.021	
Amendment PPLICATION DISCLOSURE			
his information is collected under the authority of the Apovisions of the Freedom of Information and Protection ritten request that certain sections remain private.	or Privacy Act. This information is put	ine difficulty time	and grants a
ny construction prior to obtaining an NRCB permi	t is an offence and is subject to e	forcement a	ction, including
rosecution. the applicant, or applicant's agent, have read and underovided in this application is true to the best of my known	erstand the statements above, and I wledge.	acknowledge ti	nat the information
Nanch 13 2024	Signature		
ate of signing	Signature	-1 . 1	
orporate name (if applicable)	Print name	STANL	
CALEDAL INCODMATION PEOUIREMENTS		T-dianta v	hother any of the
Proposed facilities: list all proposed confined feeding	operation facilities and their dimensi	ons. Indicate v	mether any or the
proposed facilities are additions to existing facilities. (a	ittach additional pages il tiecessy		nensions (m)
Proposed facilities		(length,	width, and depth)
SwinE Q BATIN		72×1-	+x4'
On June 18, 2024	, the applicant advised the	y would lik	e to change the
dimensions to 74'	x 16' x 4' deep pits (22.6 r	h x 4.9 m x	(1.2 m deep)
Existing facilities: list ALL existing confined feeding	operation facilities and their dimension	ons	
Existing facilities. Inc. ALE existing commend records	Dimensions		NRCB USE ONLY
Existing facilities	(length, width, a	nd depth)	
NRCB USE ONLY			



Existing facilities continued	I		Dimensions (m) (length, width, and depth)	NRCB USE ONLY		
Existing permitted facilities						
Facility	Dimensions	Permit		NUMBER OF THE PROPERTY OF THE		
Poultry barn	36.6 m x 18.3 m	RA120		Confirmed		
Poultry barn in-barn pit	9.1 m x 1.2 m x 0.6 m deep	RA120		Committee		
Replacement cow corral	40.0 m x 62.0 m (shed	RA120	148			
(includes shed in new corral)	measures 19.0 m x 10.0 m)			NAMES OF TAXABLE PARTY.		
Sorting pen	65.0 m x 12.0 m	RA120				
Dairy barn	47.6 m x 79.3 m		(Settler County)			
Replacement/dry cow barn	90.0 m x 22.0 m		ed permit under section f AOPA			
_	on the submitted site plan in App	olication F	 RA16034A):			
 Swine barn 182.9 m x 60 	,					
Permitted Construction from I	Authorization RA16064:					
Expansion of feedlot pen	s (total dimension of pens after e	xpansion	: 45.7 m x 39.6 m)			
Permitted Construction from I	V id +					
•	ons: 120 ft. x 90 ft. (36.5 m x 27.7	m))				
Permitted construction form A	Approval RA12057:					
 Expansion of the existing m deep, to a total size of 	g earthen liquid manure storage (E 127 m x 73.8 m x 5.0 m deep	EMS) by s	50.8 m x 73.9 m x 5.0			
				lieu Laces		
10						



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

f a new facility is replacing an old facility, please	explain what will happ	en to the old facility and	when. UN/A			
Α .						
No						
•						
	· =					
Construction completion date for proposed facilit	ies 2026					
Additional information			5-			
Additional information						
	<u> </u>					
Livestock numbers: Complete only if livestock numbers increase in your Part 2 application,	pers are different from what a new Part 1 application n	at was identified in the Part nust be submitted which ma	1 application. Note: if y result in a loss of			
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			
	Total Po	rmitted Animal Ca	nacity from			
(1 1	Totalle		for this site			
	400 milking	400 milking cows (plus associated dries				
	and replacements)					
11/12/01/20			eef finishers			
1/10 Chance			eef feeders —			
J V			beef calves			
		600 sows, farr				
			cken layers -			
			ken broilers			
= = =		,	700 geese			
			600 ducks			

Last updated September 11, 2023



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

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. 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 58

Signed this B day of MARCH, 2024

Signature of Applicant or Agent



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

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

- 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 <u>not</u> 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).

		- W			-			
Signed this	day of		, 20_					
				1000		Signature of	Applicant or A	gent







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

Facility des	is section for the worst case of the exist cription I name (as indicated on site) RANN	olan)	h is the closest t				posed facilities)
Proposed	2: Q BARN		10	Propose	d 3:		
	y and environmental risk		Faci	lities			NRCB USE ONLY
Facilit	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	X YES NO YES with exemption	Confirmed
10 6	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?	0	0			YES NO YES with exemption	Confirmed on site visit
Sui	What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal)	300'	300'			YES NO YES with exemption	500 m from proposed new barn to seasonal waterway
water	What is the depth to the water table?	25'	25'			YES NO YES with exemption	7.62 m
Groundwater	What is the depth to the groundwater resource/aquifer you draw water from?	60	60			YES NO YES with exemption	UGR identified at 17.6 m in WW 1075425

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

			The state of the s		NRCB USE ON	Y	
Neighbour name(s)	Legal land description	Distance (m)	Zoning (LUB) category	MDS category (1-4)	Distance (m)	Waiver attached (if required)	Meets regulations
Storite	NE OF RES.	1 miles	AG	1	832 m		
ACRAGE Boudreau	Nouth Q Born		Ag	1	1907 m		
700 %	1700000						
					Begger		

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

N A.		NRCB USE 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			- W		
14/7 TOLY ACTION ZOLONO					
	20% Ne%4				
	<u> </u>		Total		PERSONNELS STATE

^{*} 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)

^{**} 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

${\bf Part~2-Technical~Requirements}$



ERST for existing facilities Facility Groundwater score Surface water score File number Low RA12057	ERST for existing facilities Facility Groundwater score Surface water score File num EMS Low Low RA12057 Cow pens Low RA16034	ERST for existing facilities Facility Groundwater score Surface water score File in EMS Low Low RA12057 Cow pens Low RA16034	Facility	Groundwater score	Surface water score	File number
Facility Groundwater score Surface water score File number Low RA12057	Facility Groundwater score Surface water score File num EMS Low Low RA12057 Cow pens Low Low RA16034	Facility Groundwater score Surface water score File in EMS Low Low RA12057 Cow pens Low Low RA16034	Quarantine barn	Low	Low	RA24013
Facility Groundwater score Surface water score File number Low RA12057	Facility Groundwater score Surface water score File num EMS Low Low RA12057 Cow pens Low Low RA16034	Facility Groundwater score Surface water score File in EMS Low Low RA12057 Cow pens Low Low RA16034				
Facility Groundwater score Surface water score File number Low RA12057	Facility Groundwater score Surface water score File num EMS Low Low RA12057 Cow pens Low Low RA16034	Facility Groundwater score Surface water score File in the score EMS Low Low RA12057 Cow pens Low Low RA16034				
EMS Low Low RA12057	EMS Low Low RA12057 Cow pens Low Low RA16034	EMS Low Low RA12057 Cow pens Low Low RA16034				
	Cow pens Low RA16034	Cow pens Low RA16034	Facility	Groundwater score	Surface water score	File number
Cow pens Low RA16034			EMS	Low	Low	RA12057
	RST related comments:	RST related comments:	Cow pens	Low	Low	RA16034
	ERST related comments:	ERST related comments:				
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	ERST related comments:	ERST related comments:				
	ERST related comments:	ERST related comments:				



NRCB USE ONLY WATER WEL		WATER INFORMATI	ON					
Well IDs: No water wells within 400 m of proposed barn								
Well 1D3.								
			 -					
Surface water re	lated concerns from di	rectly affected parties or ref	erral agencies:	☐ YES	⊠ NO			
Groundwater rela	ated concerns from dir	ectly affected parties or refe	rral agencies:	☐ YES	⊠ NO			
Water wells	⊠ N/A							
If applicable, exe	emption for 100 m dist	ance requirements applied:	YES NO Condition	required:	□ NO			
Surface water	⊠ N/A							
If applicable, exe	emption for 30 m dista	nce requirements applied:	YES NO Condition	required:	□ NO			
Water Well Exe	emption Screening T	ool 🖾 N/A						
Wate	er Well ID	Preliminary Screening Score	Secondary Screening Score	Facility	/			
		Score	30016					
Groundwater o	r surface water rela	ted comments:						



MINIMUM DISTANCE SEPARATION										
Aerial photogr	aphy									
1000	1004	2222								
tegory 2: 1033 m	1 Category 3: 1291 m	Category 4: 2066 m								
	☐ YES 🗵	NO								
	☐ YES ☑	NO								
or referral agencies	s:	NO								
ST APPLICAT	ION									
s										
	Requirement met: YES	J NO								
□ NO										
□ NO	If yes, plan is attached: \Box									
☐ YES ☒ NO										
☑ YES ☐ NO										
☐ YES ☒ NO										
☐ YES ☐ NO [□ N/A									
	er referral agencies ST APPLICAT NO NO YES NO YES NO YES NO	Requirement met: YES C NO NO If yes, plan is attached: YES NO YES NO YES NO								



NRCB USE ONLY						
ALL SIGNATURES	IN FILE	⊠YES □]no			
DATES OF APPROV	AL OFFICER SITE V	ISITS				
March 13, 2024						
May 16 2024						
	E WITH MUNICIPAL			AGENCIE	S	
	t: March 18, 2024; ren	otified Jur	ne 19, 2024	_		
Municipality: Stettler	County			_		
letter sent	response received	⊠ writter	n/email	verbal		no comments received
Alberta Health Service	es: 🗵 N/A					
☐ letter sent	\square response received	☐ writter	n/email	verbal		no comments received
Alberta Environment a	nd Parks:					
☑ letter sent	response received	writter	n/email	verbal		no comments received
Alberta Transportation	: ⊠ N/A					
☐ letter sent	response received	☐ writter	n/email	verbal		no comments received
Alberta Regulatory Ser	vices: 🖾 N/A					
☐ letter sent	response received	☐ writter	n/email	verbal		no comments received
A may I Itilitian	Dal CD Canada I td			_		
Other: Apex Utilities,	Dei GP Canada Ltd			D N	I/A	
☑ letter sent	response received	☐ writter	n/email	verbal	×	no comments received
Other:				D N	I/A	
☐ letter sent	☐ response received	☐ writter	n/email	verbal		no comments received



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	lon	site	pla	n
----------------------	---	--------	----	-----------	-----	------	-----	---

1. BARN 2. Pits

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.	72'	141			
2.	72'	14)	4	4)	132 cubic metres
3.					
_	1 10 000	4 41 11 4	1.1. 1.41	TOTAL CAPACITY	

On June 18, 2024, the applicant advised they would like to change the dimensions to 74' x 16' x 4' deep pits (22.6 m x 4.9 m x 1.2 m deep)

Concrete liner details				
	Concrete thickness		Method of sulph	ate protection
	1 11			
	6"		1100	
			I HSS	
Scrape alleys or			wi -	
unslatted portions of				
barn floors (if	Concrete strength		Concrete reinforcement size and spacing	
applicable)			Le Go ala	
	32 Mpt		12mm Relana	
			14" 0 0	
			(0 0).(<u> </u>
	Concrete thickness		Method of sulph	ate protection
	(0"			
	0		HSS	
			() フフ	
In-barn manure pit			Concrete reinforcement size and spacing	
floors	Concrete strength			
	32 Mpt		15 1000	REDAN
	02110		CZIVIII	A EDIAUL
			1 1 1 1	
			16"00)
	Concrete thickness		Method of sulph	ate protection
			, .canoa or salpr	man brandage,
	10"			
			1106	
			H55	
In-barn manure pit				
walls	Concrete strength	Horizontal reinfo	orcement size	Vertical reinforcement size and
J	00.10.000 00.011901	and spacing		spacing
]				
	32 mpt	12 mm		12 mm
		16"00		16°0C.
		(4 0,0		1600.



LIQUID MANURE COLLECTION AND/OR STORAG		16.7
Describe how the joints at the junction of the pit walls, pit floors	and any other joints will be sealed	
Sika Swall		
Describe sealing practices for piping, etc. that penetrates the line	er	
Not Conneceted with has	go on~	
Pit is Contained		
Concrete requirements can be found in Technical Guideline Agdex 096-93	NRCB USE ONLY	
Guideline minimums: Solid manure: 25MPa (D) Solid manure (wet): 30MPa (C)	Requirements met:	YES NO
Liquid manure: 32MPa (B) 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		

iquid manure storage volume calculator atta	nea: LI YES A NOTHER	ay assessed in previous	perints
Depth to water table: > 7 m		Requirements met:	YES NO
Depth to uppermost groundwater resource: 1	7.6 m	Requirements met:	¥ YES □ NO
ERST completed: 🔀 see ERST page for detai	S		
Concrete liner requirements			
Leakage detection system required:	☐ YES X NO If	yes, please explain why	