

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 type="checkbox"/> Approval <input type="checkbox"/> Registration <input checked="" type="checkbox"/> Authorization <input type="checkbox"/> Amendment | LA24021 | SW 8 & SE 7-3-25 W4M |

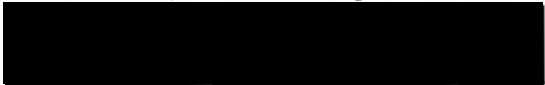
APPLICATION DISCLOSURE

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.

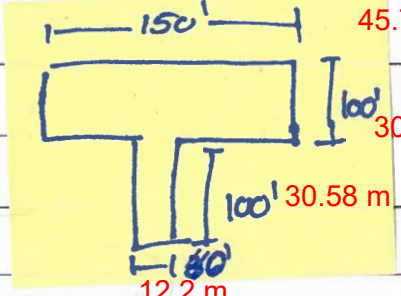
April 23rd 2024
Date of signing


Signature
Merlin R. Bevan's
Print name

Corporate name (if applicable)

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) | |
|--|---|---------|
| Dairy Barn Extension (L shape) | See picture | |
| New Heifer Barn |  | |
| Dimensions 60 x 100 ft (18.3 m x 30.5 m) | | 30.58 m |
| | | 30.58 m |

Existing facilities: list ALL existing facilities and their dimensions

| Existing facilities | Dimensions (m) (length, width, and depth) | NRCB USE ONLY |
|---------------------|--|---------------|
| | | |
| | | |
| | | |

NRCB USE ONLY

See list next page. All facilities and dimensions confirmed

Authorization LA19018 – Appendix

Existing permitted facilities

- Dairy barn: 15 m x 32 m
- Milking cow pen: 40 m x 60 m
- Dry cow pens: 60 m x 38 m (footprint includes calf barn 1) (Pens to be decommissioned) ✓
- Calf barn 1: 25 m x 14 m
- Calf barn 2 (next to sick barn): 13 m x 13.5 m
- Sick barn: 7.5 m x 15 m

AO comment: The construction of the maternity barn (permitted under LA19018) has been completed.

AO comment: The maternity barn (12.2 m x 21.3 m) is attached to the south side of the existing dairy barn. See site photo below. The proposed construction of the calf/heifer barn requires the decommissioning of the milking cow pen, calf barn 2 and sick barn (see comment below).

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)

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

N/A

Construction completion date for proposed facilities Dec 26

Additional information

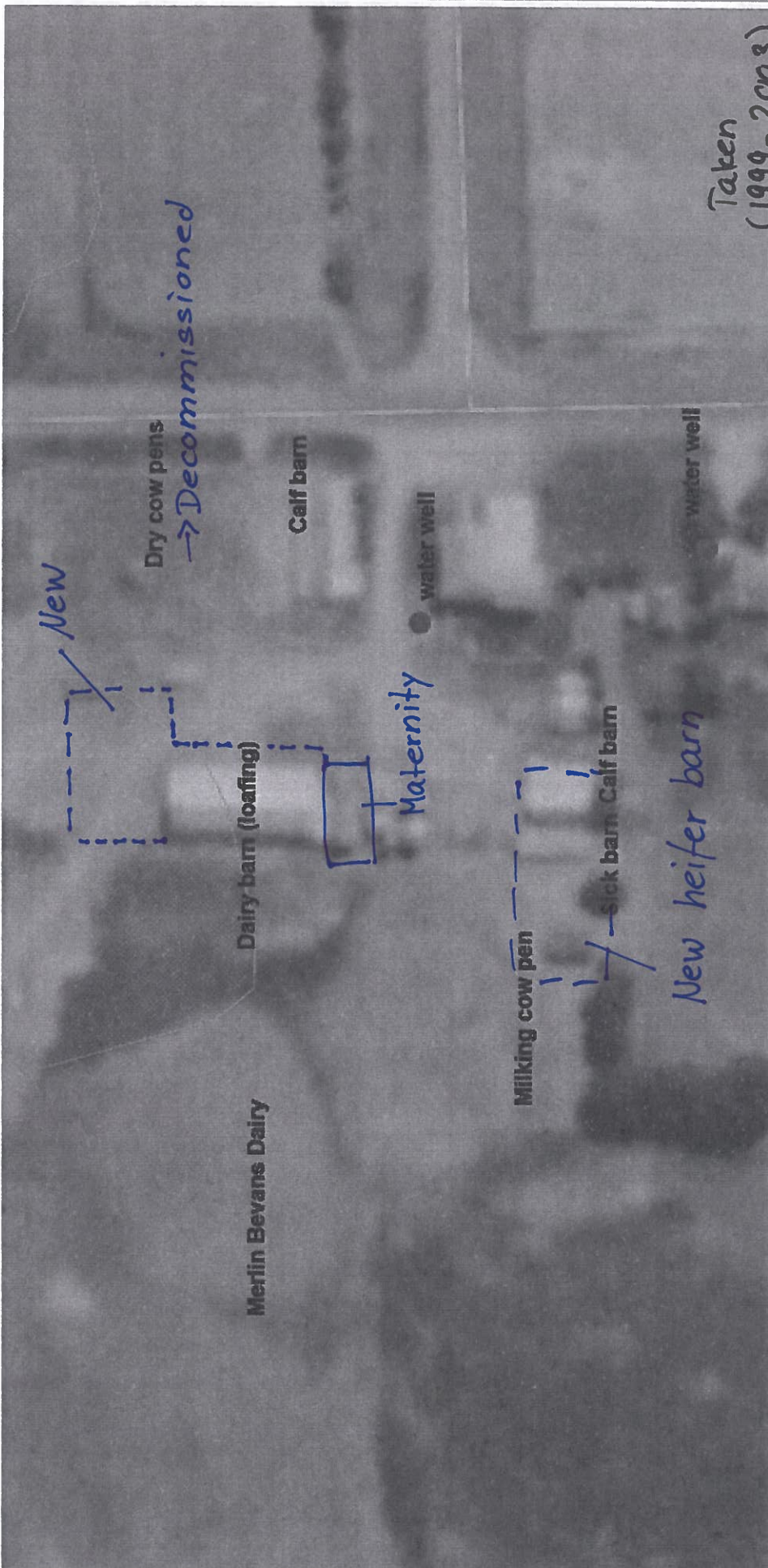
The new heifer barn will cover the sick barn + calf barn + parts of the milking cow pen.

AO comment: See site photo below

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 |
|---|------------------|--|-------|
| | | | |
| | | | |
| No changes to permitted animal numbers (85 dairy cows plus associated livestock) | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Natural Resource Conservation Board



Display may contain: Base Map Data provided by the Government of Alberta under the Alberta Open Government Licence, Cadastral and Dispositions Data provided by Alberta Data Partnerships, GeoEye, All Rights Reserved.
 © 2019 Government of Alberta

The Crown provides this information without warranty or representation as to any matter including but not limited to whether the data/information is correct, accurate or free from error, defect, danger or hazard and whether it is otherwise useful or suitable for any use the user may make of it.

This site is created, maintained, and monitored by AEP in direct consultation with the data authority.

Alberta Environment and Parks

0 0.01 0.0 Kilometers

Projection: NAD_1983_10TM_AEP_Forest
 Map Scale: 1,128
 Printed on: April 03, 2019 15:57:48 -06:00

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 _____ *An existing water license is in place*

Signed this 23 day of April, 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)

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

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)

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: Old Dairy Barn

Proposed 1: Dairy Barn Extension

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 located in known flood plain |
| | Surface water information | How many springs are within 100 m of the manure storage facility or manure collection area? | None | | | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption | none observed during site visit or in EPA database |
| | How many water wells are within 100 m of the manure storage facility or manure collection area? | 2 | Water Wells | | | <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES with exemption | The dairy barn extension is 35 m away from one well |
| | What is the shortest distance from the manure collection or storage facility to a surface water body? (e.g., lake, creek, slough, seasonal) | 40 M. | 50 m | | | <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES with exemption | 8 m from existing dairy barn 16 m from new extension to drain |
| Groundwater information | What is the depth to the water table? | 3m | 3m | | | <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES with exemption | Estimated. |
| | What is the depth to the groundwater resource/aquifer you draw water from? | 12m | 12m | | | <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> YES with exemption | 12 m (well ID 299134) |

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

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 |
|----------------------|-------------------|---------------------|-------------|
| dairy barn extension | low | low | LA24021 |
| new calf/heifer barn | low | low | LA24021 |
| | | | |
| | | | |
| | | | |
| | | | |

ERST for **existing** facilities

| Facility | Groundwater score | Surface water score | File number |
|---|-------------------|---------------------|-------------|
| all barns (both calf barns, maternity barn, dairy barn) | low | low | LA19018 |
| milking cow pens | low | moderate | LA19018 |
| The milking cow pens are proposed to be decommissioned | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

ERST related comments:

The dry cow pens that also scored moderate for risk to surface water have been decommissioned

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: water well ID299134 ID293986 ID289523

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 |
|-------------------|-----------------------------|---------------------------|--------------|
| Water well 299134 | 13 | 12 | dry cow pens |
| Water Well 293986 | 15 | 12 | dry cow pens |
| Water Well 289523 | 14 | 12 | dry cow pens |
| | | | |
| | | | |
| | | | |
| | | | |

Groundwater or surface water 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 | | | | |
|-------------------------------|------------------------|--------------|-----------------------|--------------------|--------------|-------------------------------|-------------------|
| | | | Zoning (LUB) category | MDS category (1-4) | Distance (m) | Waiver attached (if required) | Meets regulations |
| Richard Palmer | NW 8-3-25-W4 | 250m | Ag | 1 | 299 m | | yes |
| Residence in Town of Cardston | | | Urban | 4 | 426 m | see below | 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) |
| | | | | | |
| | | | | | |
| No increase of annual manure production | | | | | |
| | | | | | |
| | | | | | |
| 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)

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): +/- 2 m

Requirements (m): Category 1: 238 m Category 2: 317 m Category 3: 396 m Category 4: 634 m

Technology factor: YES NO

Expansion factor: YES NO

MDS related concerns from directly affected parties or referral agencies: YES NO

The closest neighbor is 299 m to the north. The MDS to this residence has been met. The proposed construction will not get any closer to the closest neighbour location within town limits of Cardston as the grandfathered facilities.

LAND BASE FOR MANURE AND COMPOST APPLICATION

Land base required: _____

Land base listed: _____

Not applicable. No increase in annual manure production

Area not suitable: _____

Available area: _____

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 Authorization LA19018

Name
Address
Legal Land
Location

MDS Spreadsheet based on 2006 AOPA Regulations

| Category of Livestock | Type of Livestock | Factor A | Technology Factor | MU | LSU Factor | Number of Animals | LSU |
|---------------------------------------|---|----------|-------------------|-------|------------|-------------------|------|
| Beef | Cows/Finishers (900+ lbs) | 0.700 | 0.700 | 0.910 | 0.446 | | - |
| | Feeders (450 - 900 lbs) | 0.700 | 0.700 | 0.500 | 0.245 | | - |
| | Feeder Calves (<550 lbs) | 0.700 | 0.700 | 0.275 | 0.135 | | - |
| | Other | | | | | | - |
| Dairy (*count lactating cows only) | *Free Stall - Lactating Cows with all associated dries, heifers, and calves | 0.800 | 1.100 | 2.000 | 1.760 | | - |
| | *Free Stall - Lactating cows with Dry Cows only | 0.800 | 1.100 | 1.640 | 1.443 | | - |
| | Free Stall - Lactating Cows only | 0.800 | 1.100 | 1.400 | 1.232 | | - |
| | Tie Stall - Lactating cows only | 0.800 | 1.000 | 1.400 | 1.120 | | - |
| | Loose Housing - Lactating cows only | 0.800 | 1.000 | 1.400 | 1.120 | 85 | 95.2 |
| | Dry Cow (Solid manure) | 0.800 | 0.700 | 1.000 | 0.560 | 20 | 11.2 |
| | Dry Cow (Liquid manure) | | | | | | |
| | Replacements - Bred Heifers (Breeding to Calving) | 0.800 | 0.700 | 0.875 | 0.490 | 15 | 7.4 |
| | Replacements - Growing Heifers (350 lbs to breeding) | 0.800 | 0.700 | 0.525 | 0.294 | 20 | 5.9 |
| | Calves (< 350 lbs) | 0.800 | 0.700 | 0.200 | 0.112 | 30 | 3.4 |
| Other | | | | | | | - |
| Swine Liquid (*count sows only) | Farrow to finish * | 2.000 | 1.100 | 1.780 | 3.916 | | - |
| | Farrow to wean * | 2.000 | 1.100 | 0.670 | 1.474 | | - |
| | Farrow only * | 2.000 | 1.100 | 0.530 | 1.166 | | - |
| | Feeders/Boars | 2.000 | 1.100 | 0.200 | 0.440 | | - |
| | Growers/Roasters | 2.000 | 1.100 | 0.118 | 0.260 | | - |
| | Weaners | 2.000 | 1.100 | 0.055 | 0.121 | | - |
| Other | | | | | | - | |
| Swine Solid (*Count sows only) | Farrow to finish * | 2.000 | 0.800 | 1.780 | 2.848 | | - |
| | Farrow to wean * | 2.000 | 0.800 | 0.670 | 1.072 | | - |
| | Farrow only * | 2.000 | 0.800 | 0.530 | 0.848 | | - |
| | Feeders/Boars | 2.000 | 0.800 | 0.200 | 0.320 | | - |
| | Growers/Roasters | 2.000 | 0.800 | 0.118 | 0.189 | | - |
| | Weaners | 2.000 | 0.800 | 0.055 | 0.088 | | - |
| Other | | | | | | - | |
| Poultry | Chicken - Breeders - Solid | 1.000 | 0.700 | 0.010 | 0.007 | | - |
| | Chicken - Layers - Liquid (includes associated pullets) | 2.000 | 1.100 | 0.008 | 0.018 | | - |
| | Chicken - Layers - (Belt Cage) | 2.000 | 0.700 | 0.008 | 0.011 | | - |
| | Chicken - Layers - (Deep Pit) | 2.000 | 0.700 | 0.008 | 0.011 | | - |
| | Chicken - Pullets/Broilers | 1.000 | 0.700 | 0.002 | 0.001 | | - |
| | Turkey - Toms/Breeders | 1.000 | 0.700 | 0.020 | 0.014 | | - |
| | Turkey - Hens (light) | 1.000 | 0.700 | 0.013 | 0.009 | | - |
| | Turkey - Broilers | 1.000 | 0.700 | 0.010 | 0.007 | | - |
| | Ducks | 1.000 | 0.700 | 0.010 | 0.007 | | - |
| | Geese | 1.000 | 0.700 | 0.020 | 0.014 | | - |
| | Other | | | | | | - |
| Horses | PMU | 0.650 | 0.700 | 1.000 | 0.455 | | - |
| | Feeders > 750 lbs | 0.650 | 0.700 | 1.000 | 0.455 | | - |
| | Foals < 750 lbs | 0.650 | 0.700 | 0.300 | 0.137 | | - |
| | Mules | 0.600 | 0.700 | 1.000 | 0.420 | | - |
| | Donkeys | 0.600 | 0.700 | 0.670 | 0.281 | | - |
| | Other | | | | | | - |
| Sheep | Ewes/Rams | 0.600 | 0.700 | 0.200 | 0.084 | | - |
| | Ewes with lambs | 0.600 | 0.700 | 0.250 | 0.105 | | - |
| | Lambs | 0.600 | 0.700 | 0.050 | 0.021 | | - |
| | Feeders | 0.600 | 0.700 | 0.100 | 0.042 | | - |
| | Other | | | | | | - |
| Goats | Meat/Milk (per Ewe) | 0.700 | 0.700 | 0.170 | 0.083 | | - |
| | Nannies/Billies | 0.700 | 0.700 | 0.140 | 0.069 | | - |
| | Feeders | 0.700 | 0.700 | 0.077 | 0.038 | | - |
| | Other | | | | | | - |
| Bison | Bison | 0.600 | 0.700 | 1.000 | 0.420 | | - |
| | Other | | | | | | - |
| Cervid | Elk | 0.600 | 0.700 | 0.600 | 0.252 | | - |
| | Deer | 0.600 | 0.700 | 0.200 | 0.084 | | - |
| | Other | | | | | | - |
| Wild Boar | Feeders | 2.000 | 0.800 | 0.140 | 0.224 | | - |
| | Sow (farrowing) | 2.000 | 0.800 | 0.371 | 0.594 | | - |
| | Other | | | | | | - |

Total 123.0

For New Operations

Dispersion Factor 1

| Category | Odour Objective | Distance | |
|----------|-----------------|----------|--------|
| | | Feet | Metres |
| 1 | 41.04 | 780 | 238 |
| 2 | 54.72 | 1,040 | 317 |
| 3 | 68.4 | 1,300 | 396 |
| 4 | 109.44 | 2,080 | 634 |

For Expanding Operations

Dispersion Factor 1
Expansion Factor 0.77

| Category | Odour Objective | Distance | |
|----------|-----------------|----------|--------|
| | | Feet | Metres |
| 1 | 41.04 | 600 | 183 |
| 2 | 54.72 | 801 | 244 |
| 3 | 68.40 | 1,001 | 305 |
| 4 | 109.44 | 1,601 | 488 |

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

| | |
|----------------|--|
| April 23, 2024 | |
| | |
| | |

CORRESPONDENCE WITH MUNICIPALITIES AND REFERRAL AGENCIES

Date deeming letters sent: June 6, 2024

Municipality: Cardston County

letter sent response received written/email verbal no comments received

Alberta Health Services: NA

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: Town of Cardston N/A

letter sent response received written/email verbal no comments received

Other: Atco Gas N/A

letter sent response received written/email verbal no comments received

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. Extension South
2. Extension EAST
3. Heifer Barn

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. | 100 | 150 | 0 | |
| 2. | 40 | 100 | 0 | |
| | | | TOTAL CAPACITY | |

As per email
Heifer shed (barn)
18.3 m x 30.5 m

I plan to use this facility in accordance with the requirements of my manure storage and handling plan for this CFO. The AOPA [Manure Storage Requirements Fact Sheet](#).

Surface water control systems

Describe the run-on and runoff control system

UNDER ROOF

Liner protection

Describe how the physical integrity of the liner will be maintained

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 <i>6 inch</i> | Method of sulphate protection: <i>TYPE 50</i> |
| Concrete strength <i>30 MPA</i> | Concrete reinforcement size and spacing <i>10 mm Rebar. 16 inch co</i> |

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: *3 m below ground (estimated)* Requirements met: YES NO

Depth to Uppermost groundwater resource: *> 12 m below ground* Requirements met: YES NO

ERST completed: see ERST page for details

Surface water control systems

Requirements met: YES NO Details/comments:

Concrete liner details

Condition will be attached to provide proof that the liner requirements have been met.

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

