

Decision Summary RA24039

This document summarizes my reasons for issuing Authorization RA24039 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24039. All decision documents and the full application are available on the Natural Resources Conservation Board (NRCB) website at www.nrcb.ca under Confined Feeding Operations (CFO)/CFO Search. My decision is based on the Act and its regulations, the policies of the NRCB, the information contained in the application, and all other materials in the application file.

Under AOPA this type of application requires an authorization. For additional information on NRCB permits please refer to www.nrcb.ca.

1. Background

On September 16, 2024, Connor Richards on behalf of Richards Farms Ltd. (Richards Farms) submitted a Part 1 application to the NRCB to construct a manure storage facility (MSF) and to modify an existing manure collection area (MCA) at an existing dairy CFO.

The purpose of the application is to switch from a solid manure system to a liquid manure system.

The Part 2 application was submitted on March 4, 2025. On March 5, 2025, I deemed the application complete.

The proposed construction involves:

- Relining and constructing an addition to the existing dairy barn – 114 m x 23 m (final dimensions) including two liquid manure pits (4.3 m x 4.3 m x 3.7 m deep and 17.4 m x 3.7 m x 1.8 m deep)
- Constructing a new earthen manure storage (EMS) – 76 m x 76 m x 4.5 m deep
- Decommissioning the existing EMS (wash water pond)

a. Location

The existing CFO is located at NW 10-37-27 W4M, in Red Deer County, roughly 5 km south of Red Deer, Alberta. The terrain is generally flat. The closest common body of water is Slack's Slough approximately 2.9 km northwest of the CFO. There is a seasonal slough less than 30 metres from the proposed barn renovation/expansion, however it is not a common body of water.

b. Existing permits

The CFO is permitted under a grandfathered (deemed) approval (including Red Deer County Development Permit D-201-99), as well as Authorizations RA16041 and RA17026.

2. Notices to affected parties

Under section 21 of AOPA, the NRCB notifies all parties that are “affected” by an authorization

application. Section 5 of AOPA's Part 2 Matters Regulation defines "affected parties" as:

- the municipality where the CFO is located or is to be located
- in the case where part of a CFO is located, or is to be located, within 100 m of a bank of a river, stream or canal, a municipality entitled to divert water from that body within 10 miles downstream
- any other municipality whose boundary is within a notification distance. In this case, the notification distance is ½ mile (805 m) from the CFO

None of the CFO facilities are located within 100 m of a bank of a river, stream or canal.

A copy of the application was sent to Red Deer County, which is the municipality where the CFO is located.

3. Notice to other persons or organizations

Under NRCB policy, the NRCB may also notify persons and organizations the approval officer considers appropriate. This includes sending applications to referral agencies which have a potential regulatory interest under their respective legislation.

Referral letters and a copy of the complete application were emailed to Alberta Environment and Protected Areas (EPA), Alberta Agriculture and Irrigation (AGI), and Alberta Transportation and Economic Corridors (TEC).

I also sent a copy of the application to EQUUS and Canadian Natural Resources Ltd. as they are right of way holders.

Ms. Laura Partridge, a senior water administration officer with EPA, responded to the notice by stating that there is no change in animal numbers, and therefore, further water licensing is not required for the application.

I received a response from AGI stating the inspector that will be responsible for the application.

I received a response from TEC stating that TEC has no objections with the application and that a roadside development permit will not be required.

I did not receive any other responses to the application.

Authorization RA24039 does not relieve the permit holder from complying with other applicable laws, such as safety codes, other municipal bylaws, provincial legislation (e.g. Historical Resources Act), and federal legislation (e.g. Migratory Birds Convention Act).

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed construction is consistent with the land use provisions of Red Deer County's municipal development plan. (See Appendix A for a more detailed discussion of the County's planning requirements.)

5. AOPA requirements

With respect to the technical requirements set out in the regulations, the proposed construction:

- Meets the required AOPA setbacks from nearby residences, with one exception (AOPA setbacks are known as the “minimum distance separation” requirements, or MDS). The owner of that residence has signed a written waiver of the MDS requirement to their residence. Operational Policy 2016-7: Approvals, part 7.2.3 presumes that a person who provides a written MDS waiver is automatically considered to be directly affected. However, in the case of an authorization section 21(2) of the Act specifies that the only directly affected parties are the applicant and the municipality.
- Meets the required AOPA setbacks from springs and common bodies of water
- Has sufficient means to control surface runoff of manure
- Meets AOPA groundwater protection requirements for the design of floors and liners of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 9, the application meets all relevant AOPA requirements. The exemptions and monitoring condition that are required to address the AOPA requirements around water well setbacks are discussed in the following parts of this decision summary.

6. Response from the municipality

Directly affected parties are entitled to a reasonable opportunity to provide evidence and written submissions relevant to the application and are entitled to request an NRCB Board review of the approval officer’s decision.

Municipalities that are affected parties are identified by the Act as “directly affected.” Red Deer County is an affected party (and directly affected) because the existing CFO is located within its boundaries.

Mr. Richard C. Moje, a planner with Red Deer County, provided a written response on behalf of Red Deer County. Mr. Moje stated that the application is consistent with Red Deer County’s land use provisions of the municipal development plan. The application’s consistency with Red Deer County’s municipal development plan is addressed in Appendix A, attached.

Mr. Moje also listed the setbacks required by Red Deer County’s land use bylaw (LUB) and noted that the application meets these setbacks.

7. Environmental risk of facilities

New MSF/MCA which clearly meet or exceed AOPA requirements may be assumed to pose a low risk to surface and groundwater. There may be circumstances where, because of the proximity of a shallow aquifer, porous subsurface materials, or surface water systems an approval officer may require groundwater monitoring for the facility. In this case, a determination was made, and groundwater monitoring is required for water well ID 102129.

When reviewing a new authorization application for an existing CFO, NRCB approval officers assess the CFO’s existing buildings, structures, and other facilities. In doing so, the approval officer considers information related to the site and the facilities, as well as results from the NRCB’s environmental risk screening tool (ERST). The assessment of environmental risk focuses on surface water and groundwater. The ERST provides for a numeric scoring of risks, which can fall within either a low, moderate, or high-risk range. (A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB website at www.nrcb.ca.) However, if those risks have previously been assessed, the approval officer will

not conduct a new assessment unless site changes are identified that require a new assessment, or the assessment was supported with a previous version of the risk screening tool and requires updating. See NRCB Operational Policy 2016-7: Approvals, part 9.17.

In this case, the risks posed by Richards Farms' existing CFO facilities were assessed in 2016 and 2017 using the ERST. According to that assessment, the facilities posed a low potential risk to surface water and groundwater.

The circumstances have not changed since that assessment was done. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

8. Exemptions

I determined that the proposed relining and expansion of the dairy barn is located within the required AOPA setback from two water wells. As explained in Appendix B, an exemption to the 100 m water well setback is warranted due to construction and maintenance of the wells, and a monitoring condition that will be included in Authorization RA24039.

9. Terms and conditions

Authorization RA24039 permits the construction of the new EMS and the relining and expansion of the existing dairy barn.

Authorization RA24039 contains terms that the NRCB generally includes in all AOPA authorizations, including terms stating that the applicant must follow AOPA requirements and must adhere to the project descriptions in their application and accompanying materials.

In addition to the terms described above, Authorization RA24039 includes conditions that generally address construction deadline, document submission, construction inspection, and decommissioning. For an explanation of the reasons for these conditions, see Appendix C.

10. Conclusion

Authorization RA24039 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24039.

Authorization RA24039 must be read in conjunction with Richards Farms' deemed permit (including Development Permit D-201-99) and previously issued NRCB Authorizations RA16041 and RA17026. The authorization conditions will remain in effect unless amended in writing by the NRCB.

May 6, 2025

(Original signed)

Sarah Neff
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemptions from water well setbacks
- C. Explanation of conditions in Authorization RA24039

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may only approve an application for an authorization or amendment of an authorization if the approval officer holds the opinion that the application is consistent with the “land use provisions” of the applicable municipal development plan (MDP).

This does not mean consistency with the entire MDP. In general, “land use provisions” cover MDP policies that provide generic directions about the acceptability of various land uses in specific areas.

“Land use provisions” do not call for discretionary judgements relating to the acceptability of a given confined feeding operation (CFO) development. Similarly, section 22(2.1) of the Act precludes approval officers from considering MDP provisions “respecting tests or conditions related to the construction of or the site” of a CFO or manure storage facility, or regarding the land application of manure. (These types of MDP provisions are commonly referred to as MDP “tests or conditions”.) “Land use provisions” also do not impose procedural requirements on the NRCB. (See NRCB Operational Policy 2016-7: Approvals, part 9.2.7.)

Richards Farms’ CFO is located in Red Deer County and is therefore subject to that county’s MDP. Red Deer County adopted the latest revision to this plan on September 21, 2021, under Bylaw No. 2020/20.

Section 3.5 of the MDP relates to CFOs. The subsections relevant to this application are discussed below:

3.5.1 States that the County “encourages the development of *Confined Feeding Operations (CFOs)* at appropriate locations, as a means of supporting the local economy and creating employment.” This subsection likely isn’t a relevant “land use provision” but it provides a general context for interpreting and applying the other parts of section 3.5.

3.5.2 Lists six “criteria used [by the County] in responding to applications for new CFOs or expansions to existing CFOs...” This subsection is titled “Criteria for Input” (emphasis added). This subsection is intended to be used only by the County to prepare its responses to AOPA applications. Therefore, the criteria are procedural in nature and not a land use provision, and thus are not directly relevant to my MDP consistency determination.

In addition, the criteria require site and CFO-specific discretionary considerations rather than providing generic direction for appropriate land uses. As such, the six criteria are not considered by the NRCB to be “land use provisions”. (See Operational Policy 2016-7: Approvals, part 9.2) Therefore, they are not relevant to this MDP consistency determination.

3.5.3 Contains three parts under the heading “Conditions for County Support of CFOs”:

- a. States that “[t]he County shall provide input to the Natural Resources Conservation Board (NRCB) in responding to applications for new or expanded CFOs.” As with subsection 3.5.2, discussed above, this subsection focuses on the County’s response and therefore is not a land use provision and not relevant to my MDP consistency determination.

- b. States that the establishment of new CFOs shall be supported if they:
 - i. are not located within an “Exclusion Area Buffer”, as illustrated on Map 2;
 - ii. are compatible with adjacent land uses;
 - iii. are not located within an Urban Fringe Area (pursuant to Policy 3.4.5)

Richard Farms’ CFO already exists and is not a new site. The CFO is located in an exclusion area buffer, but because it is existing, the County did not have any objections (i) and is not located within an urban fringe area (iii). The CFO and the area surrounding it is designated as “Agricultural District (AG)”; therefore, I have determined that it is compatible with adjacent land uses. Richard Farms’ application meets the requirements of section 3.5.3 (b).

- c. Relates to expanding CFOs and states that “applications made to the NRCB ... may be supported if they:
 - i. are located within an Intermunicipal Development Plan (IDP) and are in accordance with the policies contained within the IDP regarding new CFOs and expanding CFOs; and
 - ii. are compatible with adjacent land uses.”

This is likely not a land use provision and is subjective as to what is considered “compatible”. Regardless, Richard Farms’ CFO is not located within an IDP area.

3.5.4 is titled “Maintain Minimum Distance Separation (MDS) from an Existing CFO”. This subsection is intended to be used only by the County to approve rezoning and residential applications. The criteria are procedural in nature and do not apply to me, therefore they are not directly relevant to my MDP consistency determination.

3.5.5 States that the County “does not support new CFOs being established within a minimum of 1.6 kilometres (1 mile), or as determined by the NRCB, of any recognized approved and future development area. This includes urban fringe or an Intermunicipal Development Plan boundary, or into an area of an existing or approved residential subdivision situated within the County, or a hamlet. Richard Farms’ CFO is an existing CFO; therefore, this section does not apply.

For these reasons, I conclude that the application is consistent with the land use provisions of Red Deer County’s MDP that I may consider.

APPENDIX B: Exemptions from water well setbacks

1. Water Well Considerations

The dairy barn and the areas that are proposed to be relined (renovated) as well as the expansion are within 100 m of two water wells. I have confirmed that 2 water wells are located approximately 28 m east and 75 m northeast from it during a site visit and via aerial imagery. This is in conflict with section 7(1)(b) of the Standards and Administration Regulation (SAR) under AOPA.

Section 7(2), however, allows for exemptions if, before construction, the applicant can demonstrate that the aquifer into which the water well is drilled is not likely to be contaminated by the manure collection area (MCA), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MCA are presumed to be low if the applicant's proposed MCA meets AOPA's technical requirements to control runoff and leakage. Approval officers also assess whether the water well itself could act as a conduit for aquifer contamination.

In this case, I felt the following factors were relevant to determine the risk of aquifer contamination via the water well:

- a. How the well was constructed
- b. Whether the well is being properly maintained
- c. Run on and runoff control of the facility, and the proposed concrete liner

These presumptions and considerations are based on NRCB Operational Policy 2016-7: Approvals, part 9.10.2.

Water well ID 102129

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 75 m northeast of the existing dairy barn is likely EPA water well ID 102129. This well is reported to have been installed in 1973 and has a perforated or screened zone from 8.8 m to 29 m below ground level across gray shale/sandstone layers. The well's casing is located below ground in a concrete pit and is used for non-domestic purposes. The well's log identifies protective layers from ground surface to 8.5 m below ground level. The well is reported to have a driven seal, but the drilling log does not include the depth at which it was placed. The well appeared to be in good condition at the time of my site inspection and its casing was protected by a welded steel cage.

Water well ID 298568

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 28 m east of the existing dairy barn is likely EPA water well ID 298568. This well is reported to have been installed in 2001 and has a perforated or screened zone from 30.5 m to 38.1 m below ground level across gray/sandy shale layers. The well's casing is a foot above ground level and is protected by two steel posts on either side. The well's log identifies protective layers from 5.8 m to 11.3 m below ground level. The well has a bentonite seal placed from ground level to 27.4 m below ground surface. The well appeared to be in

good condition at the time of my site inspection and its casing was protected by a welded steel cage. The well is upgradient of the MCA.

The NRCB has developed a “water well exemption screening tool,” based on the factors listed above, to help approval officers assess the groundwater risks associated with a nearby water well.¹

In this case, the results of the water well exemption screening tool suggest that an exemption is likely as seen in Technical Document RA24039.

Under the regulation, an approval officer may require a groundwater monitoring program for the water wells in question. In my view, due to the proximity of water well ID 102129 to the proposed barn renovation/expansion, as well as the lack of available information regarding the well’s construction, a water well monitoring condition will be included in Authorization RA24039.

Based on the above, I am prepared to grant an exemption to the 100 m water well setback requirement for the relining and expansion of the existing dairy barn.

¹ A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB website at www.nrcb.ca.

APPENDIX C: Explanation of conditions in Authorization RA24039

Authorization RA24039 includes several conditions, discussed below:

a. Construction above the water table

Section 9(3) of the Standards and Administration Regulation under the *Agricultural Operation Practices Act* (AOPA) requires the bottom of the liner of a manure storage facility or manure collection area to be not less than one metre above the water table of the site “at the time of construction.”

Richards Farms has proposed the new EMS to be constructed 2.9 m below ground level. According to the Envirowest Engineering “Site and Soil Assessment” report included in Technical Document RA24039, the water table was measured at 4.9 m below ground surface using a piezometer.

Based on this information, the proposed EMS meets the one m requirement of section 9(3). However, because the height of the water table can vary over time, a condition is included requiring Richards Farms to cease construction and notify the NRCB immediately if the water table is encountered during construction.

b. Construction Deadline

Richards Farms proposes to complete construction of the proposed relining and expansion of the existing dairy barn and the new EMS by October 20, 2026. This timeframe is considered to be reasonable for the proposed scope of work. The deadline of October 20, 2026, is included as a condition in Authorization RA24039.

c. Post-construction inspection and review

The NRCB’s general practice is to include conditions in new or amended permits to ensure that the new or expanded facilities are constructed according to the required design specifications. Accordingly, Authorization RA24039 includes conditions requiring:

- a. Richards Farms to provide an engineer’s completion report certifying that the EMS was constructed with the same liner material as that used for hydraulic conductivity testing and that the EMS was constructed according to the proposed procedures, location and design specifications. At minimum, the report shall include dimensions, depth and side slopes of the EMS. The report shall also state whether the water table was encountered during construction and if so, the depth at which it was encountered.
- b. the concrete used to construct the liner of the manure collection and storage portions of the expanded and relined dairy barn to meet the specifications for category B (liquid manure shallow pits) and category C (solid manure – wet) in Technical Guideline Agdex 096-93 “Non-Engineered Concrete Liners for Manure Collection and Storage Areas”.
- c. Richards Farms to provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the expanded and relined dairy barn.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed in accordance with the permit requirements. To be effective, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Authorization RA24039 includes conditions stating that Richards Farms shall not place livestock or manure in

the manure storage or collection portions of the expanded and relined dairy barn, nor place manure in the new EMS until NRCB personnel have inspected the facilities and confirmed in writing that they meet the authorization requirements.

d. Facility decommissioning

As noted in part 1 above, Richards Farms has proposed to decommission the existing EMS. A condition has been included in Authorization RA24039 requiring the existing EMS to be decommissioned within one year of the completion of the new EMS, in accordance with Technical Guideline Agdex 096-90, "Closure of Manure Storage Facilities and Manure Collection Areas" unless otherwise stated by the NRCB in writing.

e. Water well monitoring

As noted in Decision Summary RA24039 and Technical Document RA24039, the Water Well Exemption Screening Tool scores indicated an exemption is likely. However, due to the proximity of water well ID # 102129 to existing and proposed facilities, and the well's construction, a condition will be included in Authorization RA24039 requiring Richards Farms to sample and test raw groundwater from water well ID # 102129, according to water well monitoring requirements prescribed by the NRCB in writing ("Sampling for Water Well Monitoring" Fact Sheet). The NRCB may, based on the monitoring results and at its discretion, revise those requirements from time to time, in writing.