

Decision Summary RA24021

This document summarizes my reasons for issuing Authorization RA24021 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24021. 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 May 8, 2024, Arjan Ijzerman on behalf of Wild Rose Holsteins Ltd. (Wild Rose) submitted a Part 1 application to the NRCB to construct an addition to the southwest dairy barn at an existing dairy CFO.

The Part 2 application was submitted on June 5, 2024. On June 14, 2024, I deemed the application complete.

The proposed construction involves:

- Constructing an addition to the existing dairy barn – 47.1 m x 34.8 m (total final dimensions 127.3 m x 34.8 m)

The proposed construction is to better accommodate the housing of the replacement herd.

a. Location

The existing CFO is located at NE 2-40-28 W4M in Lacombe County, roughly 8 km northwest of Blackfalds, Alberta. The terrain is generally level and slopes gently toward a low-lying area to the southeast.

b. Existing permits

The CFO is permitted under Approval RA12025 and Authorizations RA14015, RA15029, RA16058, RA17066 and RA21033.

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 1 mile (1,600 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 Lacombe 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), and Alberta Agriculture and Irrigation (AGI).

I also sent a copy of the application to EQUUS who is a right of way holder.

A response was received from AGI stating the inspector responsible for the application.

I did not receive a response from any other organization.

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed construction is consistent with the land use provisions of Lacombe 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 all nearby residences (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS);
- Meets the required AOPA setbacks from springs and common bodies of water;
- Has sufficient means to control surface runoff of manure; and
- Meets AOPA groundwater protection requirements for the design of floors and liners of the manure collection area.

With the terms and conditions summarized in part 9 and Appendix C, the application meets all relevant AOPA requirements. The exemptions that are required to address the AOPA requirements around water well setbacks are discussed in section 8 and Appendix B of this decision summary.

6. Responses from 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.” Lacombe County is an affected party (and directly affected) because the existing CFO is located within its boundaries.

Ms. Allison Noonan, a planning services administrative assistant, and Mr. Nicklas Baran, a planner/development officer, both with Lacombe County, provided written responses on behalf of Lacombe County. Ms. Noonan and Mr. Baran stated that the application is consistent with Lacombe County’s land use provisions of the municipal development plan, and that the County has not objections to the application.

The application’s consistency with Lacombe County’s municipal development plan is addressed in Appendix A, attached.

7. Environmental risk of facilities

New CFO facilities 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 monitoring. In this case a determination was made, and no monitoring is required as there is already a water well monitoring condition for this CFO.

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 Wild Rose’s existing CFO facilities were assessed in 2012, 2014, 2015, 2016, 2017, and 2021 using the ERST. According to those assessments, the facilities posed a low potential risk to surface water and groundwater.

The circumstances have not changed since those assessments were 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 dairy barn addition 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 the water wells being properly constructed, adequate run-off and run-on control from the proposed dairy barn addition, and an existing water well monitoring condition in Approval LA12025.

9. Terms and conditions

Authorization RA24021 permits the construction of an addition to the existing dairy barn.

Authorization RA24021 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 RA24021 includes conditions that generally address a construction deadline, document submission and a construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

10. Conclusion

Authorization RA24021 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24021.

Authorization RA24021 must be read in conjunction with Wild Rose's previously issued Approval RA12025 and Authorizations RA14015, RA15029, RA16058, RA17066 and RA21033, which remain in effect.

July 25, 2024

(Original signed)
Francisco Echegaray, P.Ag.
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemptions from water well setback
- C. Explanation of conditions in Authorization RA24021

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.

Wild Rose’s CFO is located in Lacombe County and is therefore subject to that county’s MDP. Lacombe County adopted the latest revision to this plan on June 13, 2024, under Bylaw No. 1238/17. As relevant here:

Section 3.3.1 states that “All lands in the County shall be deemed to be agricultural lands unless otherwise designated by the Municipal Development Plan, an approved statutory or non-statutory plan, the Land Use Bylaw, or provincial legislation.”

I consider this section to be procedural in nature and not a valid land use provision. However, it does provide insight for the interpretation of the remaining portions of the MDP and land use bylaw (LUB).

Section 3.9.1 states, “the County shall provide input on applications for confined feeding operations to the Natural Resources Conservation Board (NRCB) under the *Agricultural Operation Practices Act*. The County’s support is subject to the following:

- a) no new confined feeding operation shall be permitted less than 1.6 kilometres (1 mile) from the boundary of:
 - (i) a town, village, summer village or hamlet;
 - (ii) an area developed or designated for multi-lot residential use; or
 - (iii) a provincial or municipal park or recreation area, or other area used or intended to be used for a recreational facility development,

except that where provincial regulations require a larger setback distance, that distance shall apply.

Further restrictions on the development of confined feeding operations may apply as directed by an Intermunicipal Development Plan or other plan approved by Council.”

Wild Rose Holsteins’ application is for the expansion of a dairy barn at an existing CFO; not for the development of a new CFO, regardless the CFO is located outside any of these 1.6 km setbacks.

As for section 3.9.1’s reference to intermunicipal development plans (IDP) or other plans approved by the County’s council, this CFO is not located within lands identified as part of an IDP or any other plans.

For these reasons, I conclude that the application is consistent with the land use provisions of Lacombe County's MDP that I may consider. This conclusion is consistent with the County's written response to the application.

APPENDIX B: Exemptions from water well setback

Water Well Considerations

The proposed dairy barn addition is to be located less than 100 m from water wells. I have confirmed that two water wells are located approximately 35 m and 45 m from it during a site visit and using 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, the following factors were relevant to determine the risk of aquifer contamination via the water well:

- a. How the wells were constructed
- b. Whether the wells are being properly maintained

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

Water Well ID #257960

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 35 m E of the proposed dairy barn addition is likely EPA water well ID #257960. This well is reported to have been installed in 1995 and has a perforated or screened zone from 39 m to 57 m below ground level across shale, sandstone, and coal. It is a pit-less well and used for non-domestic purposes. I note that in my conversations with the applicant, the water well is only used presently for the dairy operation. The well's log identifies a protective layer from 9 m to 15 m below ground level. The well has a driven and bentonite seal from ground level to 18 m below ground level (across the shale and sandstone layers). The well appeared to be in good condition at the time of my site inspection.

Water Well ID #40037

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 45 m NE of the proposed dairy barn addition is likely EPA water well ID #40037. This well is reported to have been installed in 2002 and has a perforated or screened zone from 33.5 m to 55 m below ground level across shale and sandstone. It is a pit-less well. This well is used for non-domestic purposes. I note that in my conversations with the applicant, the water well is only used presently for the dairy operation. The well's log identifies a protective layer from ground surface or 4 m to 11 m below ground level. The well has a driven seal from ground surface to 31 m below ground level (across the shale

and sandstone layers). The well appeared to be in good condition at the time of my site inspection.

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 RA24021.

Despite the above, Approval RA12025 includes a condition that requires annual testing of water wells located within 100 m of the CFO. The above determination does not affect the previously issued permit condition.

In my view, given the application meets AOPA technical requirements and because the wells were determined to be low risk, the water well exemptions are granted, and additional monitoring is not required.

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 RA24021

Authorization RA24021 includes several conditions, discussed below:

a. Construction Deadline

Wild Rose proposes to complete construction of the proposed addition to the existing dairy barn by June 5, 2025. This timeframe is considered to be reasonable for the proposed scope of work. The deadline of November 30, 2025 is included as a condition in Authorization RA24021.

b. 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 RA24021 includes a condition requiring:

- a. the concrete used to construct the liner of the manure collection and storage portion of the dairy barn addition to meet the specification for category C (solid manure – wet) in Technical Guideline Agdex 096-93 “Non-Engineered Concrete Liners for Manure Collection and Storage Areas.” Wild Rose shall provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the dairy barn addition.

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 RA24021 includes a condition stating that Wild Rose shall not place livestock or manure in the manure storage or collection portions of the new dairy barn addition until NRCB personnel have inspected the dairy barn addition and confirmed in writing that it meets the authorization requirements.