

Decision Summary RA24033

This document summarizes my reasons for issuing Authorization RA24033 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24033. 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 June 26, 2024, Johan de Haan on behalf of Ostara Holsteins Ltd. (Ostara) submitted a Part 1 application to the NRCB to construct a heifer and dry cow barn (180 ft. x 70 ft.) (54.9 m x 21.3 m) at an existing dairy CFO.

The Part 2 application was submitted on August 1, 2024. On August 2, 2024, I deemed the application complete.

On August 19, 2024, the applicant advised that they would like to modify the dimensions to 180 ft. x 80 ft. (54.9 m x 24.4 m).

a. Location

The existing CFO is located at SE 18-34-1 W5M in Red Deer County, roughly 6.5 km west-southwest of Bowden, Alberta. The terrain is flat, with an overall slope to the east.

b. Existing permits

The CFO is already permitted under Red Deer County Development Permit D-302-00.

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) and Alberta Agriculture and Irrigation (AGI).

I also sent a copy of the application to Foothills Natural Gas Co-op Ltd. and Fortis Alberta Inc. as they are right of way holders.

A representative from AGI responded and provided the name of the inspector assigned to this application.

Laura Partridge, a senior water administrator, responded on behalf of EPA. Ms. Partridge stated that the site has an existing water licence. She provided resources for the applicant to determine if additional water licensing is required, and how to apply. A copy of this response was forwarded to the applicant.

Logan Jamieson, a land coordinator student, responded on behalf of Fortis. Mr. Jamieson stated that Fortis has no issues with the proposed development.

No other responses were received.

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 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
- 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 exemption that is required to address the AOPA requirements around water well setback is discussed in the following parts 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." Red Deer

County is an affected party (and directly affected) because the proposed facility is located within its boundaries.

Mr. Richard 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 stated that the application meets the setbacks required under Red Deer County's land use bylaw (LUB).

Mr. Moje was notified of the change in dimensions of the application prior to his response.

7. Environmental risk of facilities

New MSF 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. A determination was made, and groundwater monitoring is not required due to the depth of groundwater resources and solid nature of the manure.

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 Ostara's existing CFO facilities were assessed in 2016, using the ERST, as part of the NRCB's Risk Based Compliance Program (RBC). According to that assessment, the liquid manure storage facility and in-barn pits 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.

Additionally, I completed a risk assessment on the other existing facilities on the site (milking barn, outdoor pens) that had not previously been screened. I found that these facilities also pose a low potential risk to groundwater and surface water.

8. Exemptions

I determined that the proposed heifer and dry cow barn is located within the required AOPA setback from a water well. As explained in Appendix B, an exemption to the 100 m water well setback is warranted due to the indoor nature of the barn, and how the well was constructed.

9. Terms and conditions

Authorization RA24033 permits the construction of the new heifer and dry cow barn.

Authorization RA24033 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 RA24033 includes conditions that generally address construction deadline, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

10. Conclusion

Authorization RA24033 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24033.

Authorization RA24033 must be read in conjunction with Ostara's Red Deer County Development Permit No. D-302-00 which remains in effect.

September 27, 2024

(Original signed)
Lynn Stone
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemptions from water well setbacks
- C. Explanation of conditions in Authorization RA24033
- D. Determination of deemed permit status

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.)

Ostara’s 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, therefore they 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 is 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)

Ostara’s dairy operation already exists and is not a new site. Ostara’s CFO is not located in an exclusion area buffer (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. Ostara’s 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.”

Ostara’s CFO is not located within an IDP area and is compatible with adjacent land uses. Therefore, this application is consistent with this section of the MDP.

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 not a land use provision, 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. Ostara’s 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: Exemption water well setbacks

1. Water Well Considerations

The proposed heifer and dry cow barn is to be located less than 100 m from a water well. I have confirmed that one water well is located approximately 15 m from the proposed barn during a site visit. This is in conflict with the 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 storage facility (MSF), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MSF are presumed to be low if the applicant's proposed MSF 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. The distance between the well and the proposed MSF
- d. Whether the well is up- or down-gradient from the MSF and whether this gradient is a reasonable indication of the direction of surface and groundwater flow between the two structures

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

The water well:

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well is located approximately 15 m W of the proposed heifer and dry cow barn and is likely EPA water well ID # 1245255. This well is reported to have been installed in 2002 and has a perforated or screened zone from 48.77 m to 57.91 m below ground level across sandstone layers. The well has an above ground casing. This well is used for non-domestic purposes. I note that in my conversations with the applicant, the water well is used presently for the dairy barn. The well's log identifies a protective layer from ground surface to 1.83 m below ground level. The well has a bentonite seal from ground surface to 45.11 m below ground level (across the sandstone and shale layers). The well appeared to be in good condition at the time of my site inspection and its casing was protected by steel fencing. The well is cross-gradient of the CFO and MSF.

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

¹ A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB

In this case, the results of the water well exemption screening tool suggest that an exemption is likely as seen in Technical Document RA24033.

Under the regulation, an approval officer may require a groundwater monitoring program of the water well in question. In my view, given meeting AOPA technical requirements and low potential risk assessment, monitoring is not required.

website at www.nrcb.ca.

APPENDIX C: Explanation of conditions in Authorization RA24033

a. Construction Deadline

Ostara proposes to complete construction of the proposed new heifer and dry cow barn before the 2024-2025 winter. In my opinion, a longer timeline is more appropriate as it allows for unexpected construction delays. The deadline of November 30, 2025, is included as a condition in Authorization RA24033.

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 RA24033 includes conditions requiring:

- a. the concrete used to construct the liner of the manure collection and storage portion of the heifer and dry cow barn to meet the specification for category D (solid manure – dry) in Technical Guideline Agdex 096-93 “Non-Engineered Concrete Liners for Manure Collection and Storage Areas.”
- b. Ostara to provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the heifer and dry cow 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 RA24033 includes a condition stating that Ostara shall not place livestock or manure in the manure storage or collection portions of the new heifer and dry cow barn until NRCB personnel have inspected the heifer and dry cow barn and confirmed in writing that it meets the authorization requirements.

APPENDIX D: Determination of deemed permit status

Ostara claims that the CFO is grandfathered (that is, it has a “deemed” permit) under section 18.1 of AOPA. I am treating that as a request for a determination of deemed permit status. Under section 11(1) of the Administrative Procedures Regulation under AOPA, because I am cross appointed as an NRCB inspector, I conducted an investigation into the deemed permit status of the CFO.

The investigation was to determine the capacity of the CFO that was in place on January 1, 2002.

The CFO is covered by a municipal development permit (or permit issued under the *Public Health Act*) issued before AOPA came into effect on January 1, 2002. On September 5, 2000, Red Deer County issued a permit at this location for a 100 cow dairy. Documentation provided by Red Deer County discusses the development of the milking cow barn, parlour/holding area, as well as a synthetically lined liquid manure storage facility.

During my site visit, I assessed the existing facilities and their dimensions. My assessment of the facilities matched aerial photography from 2002-present, as well as the description of the facilities in the historical documents from Red Deer County.

Based on these findings, the CFO is considered to have a deemed registration and a deemed capacity of 100 milking cows (plus associated dries and replacements). The deemed facilities are included as an appendix to Authorization RA24033.