

Decision Summary BA25012

This document summarizes my reasons for issuing Authorization BA25012 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document BA25012. 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 April 24, 2025, Rudy and Karen Gengler (Gengler) submitted a Part 1 application to the NRCB to construct a manure storage facility (MSF) and manure collection area (MCA) facilities at an existing dairy CFO.

The Part 2 application was submitted on May 8, 2025. On May 17, 2025, I deemed the application complete.

On July 9, 2025, the applicant submitted an update changing the facilities to be constructed (see TD BA25012 pg. 6). The change does not impact the decision and still meets the requirements of AOPA and Leduc County.

The proposed construction involves:

- Dairy barn addition (pack barn) – 79 m x 22 m

a. Location

The existing CFO is located at SE 6-49-25 W4M in Leduc County, roughly 8 km from the City of Leduc. The terrain is relatively flat, sloping generally to the west. The nearest body of water is the Whitemud Creek located approximately 110 m west of the CFO.

b. Existing permits

The CFO was originally permitted by Leduc County on June 12, 1998 under development permit D98-111. The CFO was grandfathered by the NRCB on April 8, 2010 as 110 milking cows (plus associated dries and replacements). On July 11, 2018 the CFO received NRCB issued Authorization BA18014 to construct a new replacement cow barn and solid manure storage pad. To date these facilities have not been constructed and the deadline to complete construction has lapsed and therefore Authorization BA18014 is cancelled.

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 0.5 miles from the CFO

A copy of the application was sent to Leduc 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 ATCO Energy as they are a right of way holder.

In a response from TEC, a development and planning technologist stated that a roadside development permit will not be required.

In discussion with a representative from AGI, they stated that as the applicant is not making changes to the milk house, they have no concerns with the application.

Authorization BA25012 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 Leduc 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 exemptions that are required to address the AOPA requirements around the setbacks to water wells are 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." Leduc County is an affected party (and directly affected) because the proposed facilities are located within its boundaries.

Mr. Benjamin Ansaldo, a planner with Leduc County, provided a written response on behalf of the County. Mr. Ansaldo stated that the application is consistent with the County's land use provisions of the municipal development plan (MDP). As the applicant updated the proposed construction, on July 17, 2025, I phoned Mr. Ansaldo to inform him of the changes. Mr. Ansaldo had no concerns with the changes. The application's consistency with the land use provisions of the County's MDP is addressed in Appendix A, attached.

Mr. Ansaldo also listed the setbacks required by Leduc County's land use bylaw (LUB) and noted that the application meets these setbacks.

7. Environmental risk of facilities

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 Gengler's existing CFO facilities were assessed in 2014 under the Risk Based Compliance program and again in 2018 using the ERST. According to those assessments, the barns and pens posed a low potential risk to surface water and groundwater after the decommissioning of the pens nearest the Whitemud Creek while the EMS scored high risk to groundwater and low risk to surface water.

The applicant was a participant with the NRCB's risk-based compliance (RBC) program which is designed to assess and monitor potential high risk facilities. The RBC program also required the applicant to submit annual water well samples from the water wells located on site.

Authorization BA18014 included a condition requiring the submission of water well samples annually to be consistent with the RBC program. As that authorization is cancelled, I will include the same condition in Authorization BA25012.

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

I also assessed the proposed facility using the ERST and determined that it poses a low risk to groundwater and surface water.

8. Exemptions

I determined that the proposed dairy barn addition 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 construction, location, and facility construction details. However, as explained above and in Appendix B, a water well monitoring condition will also be required.

9. Terms and conditions

Authorization BA25012 permits the construction of the dairy barn addition.

Authorization BA25012 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 BA25012 includes conditions that generally address construction deadlines, monitoring, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

10. Conclusion

Authorization BA25012 is issued for the reasons provided above, in the attached appendices, and in Technical Document BA25012.

Authorization BA25012 must be read in conjunction with previously issued Development Permit D98-111 which remains in effect.

July 21, 2025

(Original signed)

Nathan Shirley
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemptions from water well setbacks
- C. Explanation of conditions in Authorization BA25012

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.

Conversely, “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 8.2.5.)

Gengler’s CFO is located in Leduc County and is therefore subject to that county’s MDP. The County adopted the latest revision to this plan on June 23, 2019, under Bylaw #08-19.

Section 4.3.0.2 of the MDP lists planning objectives and policies for the County’s four agricultural areas. (The locations of these areas are shown on Map 4 of the MDP.) The existing CFO is in Area South Central/East. The MDP provisions applicable to Gengler’s CFO are discussed below.

Section 4.3.0.2(c) states that the purpose of Agricultural Area South Central/East is “to provide for a broad range of agriculture including confined feeding operations. This area currently has a number of dairy operations that will be adversely impacted by significant increases in population and/or development.” This is likely a general guiding principle and is not considered a valid land use provision, therefore it’s not relevant to my decision.

Section 4.3.2 states that the county supports the development and expansion of CFOs provided the operation is compatible with the surrounding land uses. More specifically, section 4.3.2.1 states support for new or expanded CFOs provided the operation:

- a. does not create adverse impacts on environmentally significant lands;*
- b. has a satisfactory access;*
- c. is located within Agricultural Areas A, B or C,*
- d. is carried out in accordance with generally accepted farming practices regarding the storage, disposal and spreading of manure and the disposal of animal carcasses; and*
- e. meets the minimum setback distances to urban communities and residential development as regulated by the Agricultural Operation Practices Act.*

Section 4.3.2.1 (a) is likely not a land use provision because it requires site-specific, discretionary determinations (see NRCB Operational Policy 2016-7, *Approvals* 8.2.4). Therefore, this policy is not relevant to the MDP consistency determination required by section 22(1) of AOPA. At any rate, the application meets the “technical and locational” requirements of AOPA.

Section 4.3.2.1 (b) is considered outside the mandate of AOPA. Additionally, the County did not raise concern regarding this matter.

Section 4.3.2.1 (c) is met as the CFO is located in Agricultural area A.

Section 4.3.2.1 (d) This part is likely not considered a “land use provision,” as it is likely a CFO-related “test” under section 22(2.1) of AOPA. At any rate, as the application is for an authorization and with no increase in manure production additional land base is not required.

Section 4.3.2.1 (e) the application meets the required minimum distance separation as set out by AOPA.

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

APPENDIX B: Exemption from water well setbacks

1. Water Well Considerations

The proposed dairy barn addition is to be located less than 100 m from a water well. I have confirmed that a water well with an unknown ID is located approximately 40 m from it during a site visit and using imagery. 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 manure collection area (MCA), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MSF and MCA are presumed to be low if the applicant's proposed MSF and 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. The distance between the well and the proposed MSF and MCA
- d. Whether the well is up- or down-gradient from the MSF and MCA 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.

There are two wells located on site, well ID 282389 is located 121 m from the proposed facility addition, while the unknown well is located 40 m from the proposed dairy barn addition. The well with the unknown ID in question is upslope from the proposed dairy barn addition however the direction of groundwater flow is likely towards the well.

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 more likely as seen in Technical Document BA25012.

While an exemption from the 100 meters water well setback is warranted, to provide further protection and to be consistent with on-going risk measures at the CFO through the NRCB's Risk Based Compliance program, an exemption is granted on the condition that the applicant must periodically test the well water from both the unknown water well and water well ID 282389. This condition will be included in Authorization BA25012.

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 BA25012

Authorization BA25012 includes several conditions, discussed below:

a. Construction Deadline

Gengler proposes to complete construction of the proposed new dairy barn addition by December 1, 2027. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of December 1, 2027, is included as a condition in Authorization BA25012.

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 BA25012 includes conditions 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 D (solid manure – dry) in Technical Guideline Agdex 096-93 “Non-Engineered Concrete Liners for Manure Collection and Storage Areas.”
- b. Gengler to provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the new facilities.

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 BA25012 includes a condition stating that Gengler shall not place livestock or manure in the manure storage or collection portions of the expanded facility until NRCB personnel have inspected the facility and confirmed in writing that it meets the authorization requirements.