



Decision Summary LA22012

This document summarizes my reasons for issuing Authorization LA22012 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA22012. 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 February 8, 2022, Van Diemen Farm Ltd. (Van Diemen) submitted a Part 1 application to the NRCB to expand an L-shaped earthen manure storage (EMS) by 21 m on the west side of it, to a total final dimensions of 81 m x 91.4 m x 5.5 m deep (plus a short arm 46 m x 31 m x 5.5 m which is not being expanded) at an existing dairy CFO.

The Part 2 application was submitted on March 30, 2022, and I deemed the application complete the same day.

The application also notified the NRCB of the proposed construction of a silage pit (61 m x 15.2 m). This facility is an “ancillary structure,” under section 1(1)(a.1) of the Agricultural Operations, Part 2 Matters Regulation, because it will not be used to store or collect manure or to confine livestock. Therefore, under section 4.1 of that regulation, this structure does not need to be permitted under the act.

a. Location

The existing CFO is located at NE 5-11-20 W4M in Lethbridge County, roughly 6.4 km east of Picture Butte, Alberta. The topography at the site is flat.

b. Existing permits

The CFO is already permitted under Approval LA12002 and Authorization LA17004.

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 (1,609 m) from the CFO

A copy of the application was sent to Lethbridge 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 Health Services (AHS); and Alberta Agriculture, Forestry and Rural Economic Development (AFRED).

I did not received any response from these referral agencies.

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed construction is consistent with the land use provisions of Lethbridge 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 water wells, 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/protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 8, the application meets all relevant AOPA requirements.

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. Not all affected parties are "directly affected" under AOPA.

Municipalities that are affected parties are identified by the act as "directly affected." Lethbridge County is an affected party (and directly affected) because the proposed EMS expansion is located within its boundaries.

Ms. Janzen, a senior planner with Lethbridge County, provided a written response on behalf of Lethbridge County. Ms. Janzen stated that the application is consistent with Lethbridge County's land use provisions of the municipal development plan. The application's consistency with Lethbridge County's municipal development plan is addressed in Appendix A, attached. Ms. Janzen also indicated that the application appears to meet the setbacks required by Lethbridge County's land use bylaw.

7. Environmental risk of facilities

New CFO facilities which clearly meet or exceed AOPA requirements are automatically assumed to pose a low risk to surface and groundwater. However, there may be circumstances where, because of the proximity of a shallow aquifer, or porous subsurface materials, an approval officer may require groundwater and surface water monitoring for the facility. In this case a determination was made and surface or groundwater monitoring is not required

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 8.13.

In this case, the risks posed by Van Diemen's existing CFO facilities were assessed in 2012 and 2017 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. Terms and conditions

Authorization LA22012 permits the expansion of the earthen manure storage.

Authorization LA22012 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 LA22012 includes conditions that generally address a construction deadline and construction inspection. For an explanation of the reasons for these conditions, see Appendix B.

9. Conclusion

Authorization LA22012 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA22012.

Authorization LA22012 must be read in conjunction with NRCB previously issued Approval LA12002 and Authorization LA17004 which remain in effect.

May 12, 2022

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

Appendices:

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization LA22012

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.)

Van Diemen’s CFO is located in Lethbridge County and is therefore subject to that county’s MDP. Lethbridge County adopted the latest revision to this plan on March 10, 2022, under Bylaw #22-001.

Section 3 is titled Intensive Livestock/Confined Feeding Operations, and lists several policies for CFOs, as relevant here:

3.1 New Confined Feeding Operations (CFOs) are not permitted to be established within the Municipal Development Plan Confined Feeding Exclusion Areas as illustrated on Map 2 (2A & 2B), CFO Exclusion Area.

This application is not for a new CFO; regardless, the CFO is not located within exclusion areas. I therefore conclude the application is consistent with this provision. The county response also supports this conclusion and has no concerns with this application.

3.2 The development of new CFOs shall not be supported within the prescribed CFO Exclusion Area of any identified higher density residential growth centre, such as the hamlets, or within an Intermunicipal Development Plan (IDP) stipulated CFO Exclusion Area with adjacent urban municipalities.

This application is not for a new CFO; regardless, the CFO is not located within any exclusion areas, higher density residential growth centre such as a hamlet, or within an Intermunicipal Development Plan. I therefore conclude the application is consistent with this provision. The county response also supports this conclusion and has no concerns with this application.

3.3 Existing established operations located within an urban fringe district may be permitted to expand or make improvements to the operations in consideration of any IDP policy that allows for such.

The CFO is not located within an urban fringe. I therefore conclude the application is consistent with this provision. The county response also supports this conclusion and has no concerns with this application.

3.4 For statutory plan consistency, as required under the Municipal Government Act, the County Municipal Development Plan CFO policies and associated map shall be reviewed and updated as needed to reflect any changes to a CFO Exclusion Area as agreed to and defined in an Intermunicipal Development Plan with an adjacent municipality.

This policy is procedural in nature and no relevant to my MDP consistency determination.

3.5 CFOs shall not be supported to establish or expand within the environmentally sensitive areas as shown in the Cotton Wood Report: County of Lethbridge: Environmentally Sensitive Areas in the Oldman River Region (1988) [refer to report maps]

The CFO is not located in or close to any of the environmentally significant areas noted in the report referenced in the MDP.

3.6 No part of a CFO building, structure, corrals, compost area or stockpile is to be located within the established property line and public roadway setbacks, including provincial highways, as outlined in the municipal Land Use Bylaw.

The CFO and its facilities meet the setbacks indicated on this policy.

3.7 CFOs are discretionary uses within the 'Rural Agriculture' land use district and prohibited in all other districts. CFOs are to be excluded from being established on parcels less than 80-acres in size (an exclusion area) as the stipulated minimum agricultural parcel size allowed within the 'Rural Agriculture' district is 80-acres (or 70-acres with up to 10-acres of exceptions on the title).

This provision is likely not a land use provision because it refers to specifics in respect to a site of a CFO, rather than the use of a specific land. At any rate, the quarter section on which the CFO is located meets this requirement.

3.8 The County recognizes and supports that existing CFOs located within the MDP area will be allowed to continue to operate under acceptable operating practices and within the requirements of the Agricultural Operation Practices Act and Regulations.

This policy is procedural in nature and no relevant to my MDP consistency determination.

3.9 In regard to manure application on lands in the CFO Exclusion Area, the County expects and requests that the standards and procedures as outlined in the Agricultural Operation Practices Act, Standards and Administration Regulation shall be consistently applied by the NRCB.

Authorization LA22012 contains terms stating that the permit holder must follow AOPA and its regulations.

3.10 Council or the subdivision and development approval authority shall consider the results of a reciprocally applied minimum distance separation (MDS) calculation, as applied through the

land use bylaw, using the AOPA Standards and Administration Regulation MDS as the formula when considering:

- (a) the redesignation of a parcel to Grouped Country Residential (GCR) or other district that may allow uses sensitive to CFOs,
- (b) any residential, food, community, or school development, or
- (c) any residential use subdivision application allowed for in this plan or the Land Use Bylaw unless it is within a hamlet or either a predesignated or established GCR subdivision.
- (d) Some exemptions may be applied through the Land Use Bylaw for pre-existing residences/conditions.

This policy is procedural in nature and no relevant to my MDP consistency determination.

3.11 The County will continue to consult with the NRCB on CFO matters and will be proactive in discussing either municipal policy amendments or provincial regulations regarding CFOs with the NRCB to best manage such types of development.

This policy is procedural in nature and no relevant to my MDP consistency determination

APPENDIX B: Explanation of conditions in Authorization LA22012

Authorization LA22012 includes several conditions, discussed below:

a. Groundwater protection requirements

Van Diemen proposes to construct the new earthen liquid manure storage (EMS) with a 3.3 metre thick naturally occurring protective layer. Section 9 of AOPA's Standards and Administration Regulation specifies a maximum hydraulic conductivity for this type of protective layer in order to minimize leakage.

Van Diemen measured the hydraulic conductivity of the protective layer by installing a monitoring well (or water table well) at the time of borehole drilling. This approach provides an adequate representation of the protective layers proposed to be used to protect the groundwater resource.

The regulations provide that the actual hydraulic conductivity of a 10 metre thick naturally occurring protective layer must not be more than 1×10^{-6} cm/sec.

In this case, the in situ measurement was 5.6×10^{-8} cm/sec. This value is below the maximum value in the regulations. Therefore, the proposed naturally occurring protective layer meets the hydraulic conductivity requirement in the regulations.

b. Construction deadline

Van Diemen proposes to complete construction of the proposed new earthen manure storage expansion by December 31, 2022. In my experience, a time frame allowing two full construction seasons may be more appropriate to allow for unexpected construction delays. The deadline of November 30, 2023 is included as a condition in Authorization LA22012.

c. Post-construction inspection

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, and to reduce risk to the operator, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Authorization LA22012 includes a condition stating that Van Diemen shall not place manure in the manure storage or collection portions of the new EMS expansion until NRCB personnel have inspected the EMS expansion and confirmed in writing that it meets the authorization requirements.