

Decision Summary RA23025

This document summarizes my reasons for issuing Authorization RA23025 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA23025. 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 August 22, 2023, Jake Vermeer on behalf of Vermeer's Dairy Ltd. (Vermeer's Dairy) submitted a Part 1 application to the NRCB to extend a heifer shed and construct a manure storage pad at an existing dairy CFO.

The Part 2 application was submitted on January 17, 2024. On January 25, 2024, I deemed the application complete.

The proposed modification involves:

- Constructing an addition to the heifer shed – 95.1 m x 20.1 m (for a total length of 185.1 m)
- Constructing a manure storage pad attached to the west end of the heifer shed - 12.2 m x 12.2 m

a. Location

The existing CFO is located at E ½ 4-45-19 W4M in Camrose County, roughly 10 km west of Kelsey, Alberta. The terrain slopes gently to the northeast.

b. Existing permits

The CFO is currently permitted under NRBC Approval RA17058X, issued September 20, 2018. The approval allows the construction and operation of a dairy CFO with 1,000 milking cows (plus dries and replacements). The CFO's existing permitted facilities are listed in Approval RA17058X. On December 4, 2018, Authorization RA18086 was issued to Vermeer's Dairy allowing for the removal of the berm located between the two earthen liquid manure storage (EMS) cells.

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 Camrose 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 Ankerton Gas Co-op Ltd., Atco Electric Ltd., and DEL Canada GP Ltd. as right of way holders.

I received responses from EPA, ATCO and AGI.

Ms. Laura Partridge, a senior water administration officer with EPA, requested the applicant to check their water requirements and to ensure that the water wells are properly licensed. She also requested that the applicant make sure they have the appropriate licensed water under the *Water Act*.

The email response from AGI included the dairy inspector responsible for this dairy.

Ms. Rita Klasson, a senior land administrator with ATCO indicated they have no concerns with this application.

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed expansion of the heifer shed and construction of the solid manure pad is consistent with the land use provisions of Camrose 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 modification:

- 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, liners and 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. Response 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." Camrose County is an affected party (and directly affected) because the existing CFO is located within its boundaries.

Ms. Anjah Howard, the manager of planning and development with Camrose County, provided a written response on behalf of Camrose County. Ms. Howard stated that the application is consistent with Camrose County's land use provisions of the municipal development plan (MDP). The application's consistency with Camrose County's MDP is addressed in Appendix A, attached.

Ms. Howard also listed the setbacks required by Camrose County's land use bylaw (LUB) and noted that the application meets these setbacks.

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 system an approval officer may require surface and/or groundwater monitoring for the facility. In this case a determination was made, and a new 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 9.17.

In this case, the risks posed by Vermeer Dairy's existing CFO facilities were assessed in 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. Terms and conditions

Authorization RA23025 permits the expansion to the heifer shed with an attached manure storage pad.

Authorization RA23025 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 RA23025 includes conditions that generally address construction deadlines, document submission and construction inspections. For an explanation of the reasons for these conditions, see Appendix B.

9. Conclusion

Authorization RA23025 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA23025.

Authorization RA23025 must be read in conjunction with previously issued Approval RA17058X and Authorization RA18086 which remain in effect.

March 5, 2024

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

Appendices:

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization RA23025

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may only approve an application for 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.)

Vermeer Dairy’s CFO is located in Camrose County and is therefore subject to that county’s MDP. Camrose County adopted the latest revision to this plan on April 12, 2016, under Bylaw #1372.

Below are the MDP policies that apply to CFOs.

Policy 4.3.7 requires that applications for a new or expanding CFO “meet the Agricultural Operations Practices Act (AOPA)”. This is likely not a land use provision. At any rate, as discussed in section 5 above, the application meets all relevant AOPA requirements.

Policy 4.3.8 states that “at the discretion of County Council, large CFO’s shall be prohibited in the County”. However, the MDP does not define “large CFO”. This policy is likely not a “land use provision” because it calls for discretionary judgements about the acceptable maximum size of a CFO. Regardless, the application does not include an increase in animal numbers or manure production.

Policy 4.3.9 states that the county does not support new or expanding CFOs that are “within 3,219 m (2 miles) of the City of Camrose, 3,219 m (2 miles) from any recreational lake, or 1,610 m (1 mile) from any other urban municipality or hamlet”.

Vermeer Dairy’s CFO is not located within the setbacks from the City of Camrose, an urban municipality, or a hamlet. The CFO is located 2,900 m (1.8 miles) from Dried Meat Lake, which is identified as a recreational lake under the county’s MDP.

The MDP does not define “expansion,” so I will use the definition in the Part 2 Matters Regulation under AOPA. Section 1(1)(d)(i) of that regulation defines an “expansion” as the construction of additional facilities to confine more livestock. Vermeer Dairy’s application does not involve confining more livestock, so I conclude that it is not an “expansion” under this definition. Therefore, the MDP policies relating to CFO “expansions” do not apply to Vermeer Dairy’s application. The county’s response supports this conclusion.

Policy sections 9.0 “Environmental”, are not applicable because the proposed barn is not located within an environmentally sensitive land as shown on Figure 5 of Camrose County’s MDP.

For these reasons, I conclude that the application is consistent with the land use provisions of Camrose County’s MDP. The county’s written response supports this conclusion.

APPENDIX B: Explanation of conditions in Authorization RA23025

Authorization RA23025 includes several conditions, discussed below:

a. Groundwater protection requirements

Vermeer's Dairy proposes to construct the new floor of the expansion to the heifer shed using a concrete liner on the scrape alley, and a 4.5 metre thick naturally occurring protective layer on the pack pen area. The concrete liner condition is explained in section c below. The proposed protective layer meets the requirements set out in Section 9 of AOPA's Standards and Administration Regulation.

Vermeer's Dairy 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 3.72×10^{-7} 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 and no additional condition is required.

b. Construction Deadline

Vermeer's Dairy proposes to complete construction of the proposed addition to the heifer barn with an attached manure storage pad by June 1, 2024. However, unforeseen circumstances may cause delays where additional time is needed. Therefore, a deadline of November 30, 2025 is included as a condition in Authorization RA23025.

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 RA23025 includes conditions requiring:

- a. the concrete used to construct the liner of the manure collection and storage portion of the manure storage pad and the addition to the heifer shed to meet the specification for category C (solid manure – wet) and category D (solid manure – dry), respectively, in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." Vermeer's Dairy shall provide evidence or written confirmation from a qualified third party that the concrete used for the manure collection and storage area meets the required specifications.

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 RA23025 includes conditions stating that Vermeer's Dairy shall not place livestock or manure in the manure storage or collection portions of the expansion to the heifer shed, or place manure on the manure storage pad until NRCB personnel have inspected these facilities and confirmed in writing that they meet the authorization requirements.