

Decision Summary FA24001

This document summarizes my reasons for issuing Authorization FA24001 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document FA24001. 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 21, 2024, Homeland Hutterian Brethren (Homeland) submitted a Part 1 application to the NRCB to expand an existing manure storage facility (MSF) at an existing multi species CFO.

The Part 2 application was submitted on June 21, 2024. On June 24, 2024, I deemed the application complete.

The proposed construction involves:

- Expand existing earthen liquid manure storage (EMS) – 76.2 m x 41 m x 4.6 m (76.2 m x 86.7 m x 4.6 m (total dimensions))

a. Location

The existing CFO is located at Sec 32-74-22 W5M in the Municipal District of Smoky River, roughly 26 km southwest of the Hamlet of Guy, Alberta. The terrain gently slopes to the southeast.

b. Existing permits

The CFO is already permitted under Approval FA22001.

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 1.5 miles from the CFO

A copy of the application was sent to the M.D. of Smoky River, which is the municipality where the CFO is located. The CFO is not within 100 m of a river, stream, or a canal.

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).

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed construction is consistent with the land use provisions of the M.D. of Smoky River'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's nutrient management requirements regarding the land application of manure
- Meets AOPA groundwater protection requirements for the design of floors and protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 8 and Appendix B, 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.

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." The M.D. is an affected party (and directly affected) because the proposed expansion is located within its boundaries.

Ms. Kristine Girard, the chief administrative officer/development officer with the M.D. of Smoky River, provided a written response on behalf of the M.D. Ms. Girard stated that the application is consistent with the M.D. of Smoky River's land use provisions of the municipal development plan. The application's consistency with the M.D.'s municipal development plan is addressed in Appendix A, attached.

Ms. Girard also listed the setbacks required by the M.D.s land use bylaw (LUB) and noted that the application meets these setbacks.

7. Environmental risk of facilities

When reviewing a new approval 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 Homeland's existing CFO facilities were assessed in 2015 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.

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 environmental or construction monitoring for the facility. In this case a determination was made, and monitoring is not required.

8. Terms and conditions

Authorization FA24001 permits the construction of the addition to the EMS.

Authorization FA24001 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 FA24001 includes conditions that generally address construction deadlines and construction inspection. For an explanation of the reasons for these conditions, see Appendix B.

9. Conclusion

Authorization FA24001 is issued for the reasons provided above, in the attached appendices, and in Technical Document FA24001.

Authorization FA24001 must be read in conjunction with Homeland's previously issued NRCB Approval BA22001 which remain in effect.

August 14, 2024

(Original signed)

Nathan Shirley
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization FA24001

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.)

Homeland’s CFO is located in the M.D. of Smoky River and is therefore subject to that county’s MDP. The M.D. adopted the latest revision to this plan on October 12, 2016, under Bylaw 16-886.

Section 3.2.6 of the MDP deals with CFOs and below are the relevant policies followed by my assessment for each one.

b. The Development Authority, upon consideration of policies 3.2.6(c)-(r), shall refer all applications for CFOs to Council for comments.

This policy is procedural and identifies how applications for CFO’s will be processed when received by the M.D. I do not consider this to be a land use provision and therefore will not consider it in my determination. In any case, the application was submitted to the M.D. for their review and response which they provided.

(c) The Municipal District will not support applications to the NRCB to establish or expand CFOs unless they are compatible with adjacent land uses and do not cause adverse health or environmental impacts.

This provision provides direction regarding how the M.D. will respond to CFO applications. I do not consider this to be a land use provision and therefore will not consider it in my determination as this requires discretionary judgement. Despite this, the application meets the requirements set out in AOPA. Therefore, I consider this policy met.

3.2.6(e) CFO operators must enter into a Road Use Agreement with the Municipal District.

This policy is likely not a valid “land use provision,” as it is a “condition” which I am directed under section 20(1.1) of AOPA not to consider. Additionally, this policy is procedural in nature and therefore I am not able to consider in my determination. The municipal district did not raise any concern regarding this matter. The applicant is reminded that they must comply with applicable transportation requirements and the county requested that the applicant needs to contact them in regard to road use planning.

3.2.6(f) the NRCB Approval Officer shall notify the Municipal District when Part 1 of an application for CFO has been received by the NRCB. Once Part 2 of an application has been completed and submitted to NRCB it will be available for viewing by all affected parties.

This policy is considered procedural in nature. I am therefore not considering it in my determination. However, the part 1 and part 2 were both sent to the M.D. and posted on the NRCB website.

3.2.6(g) Schedule B – Confined Feeding Operations Siting Restrictions outlines those areas restricting and allowing the placement of new and expanding CFOs within the Municipal District as well as the stipulated minimum setbacks for CFOs requiring an approval or registration with the NRCB.

3.2.6(h) All setbacks are to be measured from the peripheral boundaries of the subjects outlined within the MDP, meaning

- i. the top of bank for watercourses,*
- ii. the high water mark for waterbodies,*
- iii. the incorporated boundaries for towns, villages, and hamlet boundaries,*
- iv. road ROW boundaries, and*
- v. the outer boundary of identified recreation sites.*

3.2.6(i) Notwithstanding the Agricultural Operation Practices Act (AOPA), the expansion or establishment of CFOs will not be supported

- i. within 3.2 km (2 miles) of the boundaries of a town, village or hamlet within the Municipal District boundaries;*
- ii. within 1.6 km of a community facility or recreation area;*
- iii. within 0.8 km (1/2 mile) of Crown-owned wetlands and environmentally sensitive land;*
- iv. within the Urban Growth Corridor;*
- v. within the Urban Development Corridor;*
- vi. within 0.8 km (1/2 mile) for key waterbodies with significant recreational and environmental value including Lake 16, Lac Magloire, Kimiwan Lake, Rat Lake, Winagami Lake, Maurice Lake, and the Muskeg Lakes;*
- vii. within 30 m of all registered drainage projects; and*
- viii. within 30 m of streams and creeks.*

In accordance with Schedule B (map) of the MDP and the above listed setbacks the application meets all the listed setbacks as well as the technical and locational requirements of AOPA.

j. To ensure an appropriate setback and access for the proposed operation, a minimum roadway setback of 150 m (500 ft) is required for all CFOs. AI (requires change to LUB)

The CFO meets the roadway setback. This is confirmed in the response provided by the M.D.

k. To reduce the risk of surface and dugout water contamination, being the primary source of potable water for many residents in the Municipal District, CFOs shall include manure injection as part of the manure management plan.

Homeland Colony has previously agreed to inject all liquid manure and this condition has been carried forward to the most recent approval permit, Approval FA22001. That said, the Standards and Administration Regulation under AOPA sets several rigorous requirements relating to the application of manure from the applicant's CFO.

l. To prevent potential rural land use conflicts and preserve agricultural lands for agricultural uses within the agricultural district, CFOs are encouraged to identify and employ the long term use of effective odour reducing technology best suited to the operation and site specific conditions, to mitigate the potential negative impacts on adjacent landowners and the residents of the Municipal District.

This policy encourages CFO operators to mitigate odours. It is more of a request and is site-specific and therefore not considered to be a land use provision which I am to consider.

m. To ensure adequate emergency provisions, owners/operators of the CFOs shall work cooperatively with the Director of Disaster Services and other municipal officials as appointed by Council, in the development of an emergency response plan.

This is not considered a land use provision and therefore will not be considered in my determination. Homeland is encouraged to consider the M.D's. request to work cooperatively with their Director of Disaster Services.

n. Due to climatic constraints (primarily long winters and short growing seasons) that may inhibit timely and effective manure injection, all liquid manure tanks/lagoons should be designed to retain 18 months of storage.

This is considered a test or condition which AOPA directs me not to consider, and not a valid land use provision. At any rate, this application is to expand the existing dairy EMS and increase the storage volume.

o. To reduce the odour emissions of a confined feeding operation, the Municipality strongly encourages all liquid manure storage lagoons, reservoirs and open tanks to be covered with synthetic liners and to install biofilters.

This policy is both a request and suggestion for the management and operation of liquid manure storage facilities. I also consider it to be a test or condition which AOPA directs me not to consider, and not a valid land use provision. Because of this I will not consider it as part of my determination.

p. To alleviate the current cumulative impact(s) of an increasing number of CFOs on adjacent landowners, no new or expanding CFOs shall be permitted in the area designated on Schedule B as "Restricted" and as reviewed by Council from time to time, with input from area residents.

The CFO is not located in a restricted area designated on Schedule B.

q. Notwithstanding policy 3.2.6 (p) and other policies contained within this plan regarding CFOs, Council may consider the support of an application for a CFO in a restricted area, if the applicant can highlight and prove the technological aspects (i.e. digesters, biofiltration etc.) of the proposed operation that would reduce the cumulative effect of a new approval on existing/future land uses and property owners in the area. Further, support for an application may be granted if the proposed owner/operator can identify cooperative efforts, with the neighbours and the Municipal District, to integrate operations that reduce the impact of the CFOs within the area.

The CFO is not located in a restricted area therefore this policy does not apply.

r. Prior to considering the support of an application of a CFO under policy 3.2.6(q) in any area regarded as restricted, the applicant shall have demonstrated the appropriate enhancements of the operation that would effectively mitigate the potential environmental and emission related issues associated with the proposed development, thereby mitigating the potential risks associated with the proposed operation. An applicant may be requested to provide comparable evidence and proof that the proposed enhancement will facilitate the mitigation of environmental and emissions issues.

The CFO is not located in a restricted area therefore this policy does not apply.

For these reasons, I conclude that the application is consistent with the land use provisions of the M.D. of Smoky River's MDP that I may consider.

APPENDIX B: Explanation of conditions in Authorization FA24001

Authorization FA24001 includes several conditions, discussed below:

a. Groundwater protection requirements

Homeland proposes to construct the expanded earthen liquid manure storage (EMS) with a 15.4 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.

Homeland 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 3.73×10^{-9} 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

Homeland proposes to complete construction of the proposed EMS by the end of 2025. This timeframe is considered to be reasonable for the proposed scope of work. The deadline of December 1, 2025, is included as a condition in Authorization FA24001.

c. Post-construction inspection and review

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 FA24001 includes a condition stating that Homeland shall not place manure in the expanded EMS until NRCB personnel have inspected the facility and confirmed in writing that it meets the authorization requirements.