

## Decision Summary LA23027

This document summarizes my reasons for issuing Authorization LA23027 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA23027. All decision documents and the full application are available on the Natural Resources Conservation Board (NRCB) website at [www.nrcb.ca](http://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](http://www.nrcb.ca).

### 1. Background

On May 1, 2023, Hutterian Brethren Church of Mountainview (Mountainview Colony) submitted a Part 1 application to the NRCB to construct a sheep barn (48.7 m x 18.3 m) at an existing multi species CFO.

The Part 2 application was submitted on June 2, 2023, and I deemed the application complete the same day.

#### a. Location

The existing CFO is located at NE 19-26-25 W4M in Wheatland County, roughly 19 km north of Strathmore, Alberta. The topography at the site is flat to gently undulating with a general slope to the south and east.

#### b. Existing permits

The CFO is already permitted under Approval LA22019.

### 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 (2,414 m) from the CFO

A copy of the application was sent to Wheatland County, which is the municipality where the CFO is located, and to Rocky View County which has a boundary within the notification distance for the CFO.

The CFO is not located within 100 m of a bank of a river, stream, or 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 Health Services (AHS), Alberta Environment and Protected Areas (EPA), and the Western Irrigation District.

I also sent a copy of the application to Ember Resources.

The NRCB did not receive any responses from the agencies that were notified.

### **4. Municipal Development Plan (MDP) consistency**

I have determined that the proposed construction is consistent with the land use provisions of Wheatland 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
- Can meet AOPA groundwater protection requirements for the design of floors and liners of manure storage facilities and manure collection areas with an increase in liner thickness

### **6. Responses from municipalities**

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

Ms. Suzanne Hayes, a development officer with Wheatland County, provided a written response on behalf of Wheatland County. Ms. Hayes stated that the application is consistent with Wheatland County's land use provisions of the municipal development plan. The application's consistency with Wheatland County's municipal development plan is addressed in Appendix A, attached.

Ms. Hayes also listed the setbacks required by Wheatland County's land use bylaw (LUB) and noted that the site picture in the application does not clearly show if these setbacks have been met. A condition will be included that states that all applicable setbacks must be met.

Rockyview County is also a directly affected party because its boarders are within the notification radius. The NRCB did not receive a response from Rocky View County. The proposed development also lies with an Intermunicipal Development Plan (IDP) area between Rocky View County and Wheatland County. As explained in Appendix A below, the application is consistent with the land use provision in the IDP.

## **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, 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](http://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 some of Mountainview Colony's existing CFO facilities were assessed in 2009 (Hog EMS), and 2011 (renovated hog barns and chicken broiler barn) respectively. The assessment indicated that the potential risks to groundwater from the hog EMS and renovated hog barns was moderate, and from the chicken broiler barn was low. The risk to surface water was low for all of those facilities.

Since the 2009/11 risk assessments, an updated version of the risk screening tool was developed. For this reason, I reassessed the risks posed by the CFO's existing facilities and the proposed sheep barn. My reassessment confirmed that the hog earthen liquid manure storage (EMS) and the dairy EMS pose a moderate risk to groundwater, the feedlot and the sheep barn pose a low risk to groundwater. All other facilities assessed pose a low risk to surface water. As mentioned in Technical Document LA23027, Approval LA22019 includes a condition requiring the implementation of a plan to address the identified risk (see Decision Summary LA22019 and Approval LA22019 for detail).

## **8. Terms and conditions**

Authorization LA23027 permits the construction of the sheep barn.

Authorization LA23027 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 LA23027 includes conditions that generally address a construction deadline, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix B.

## **9. Conclusion**

Authorization LA23027 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA23027.

Authorization LA23027 must be read in conjunction with Mountainview Colony's Approval LA22019 which remains in effect.

July 12, 2023

(Original signed)  
Carina Weisbach  
Approval Officer

### **Appendices:**

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization LA23027

## **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.)

Mountainview Colony’s CFO is located in Wheatland County and is therefore subject to that county’s MDP. Wheatland County adopted the latest revision to this plan in 2018, under Bylaw #2013-18 Amendment 2018-40.

Section 3.1.3.1. of the MDP states that the county shall act as a referral agency and respond in accordance with the MDP and LUB when the Natural Resources Conservation Board is processing applications for CFO’s. In my interpretation, this is not a land use provision. Therefore, I will not consider this section in my consistency determination, regardless, I notified the county.

As relevant here, section 3.1.3.2 of the MDP states that the county encourages CFOs on parcels of land 160 acres or more. I interpret this to apply to new CFOs. Mountain View Colony’s CFO is an existing CFO. I therefore interpret this provision to not apply to this CFO.

In my view, the text in 4.4.2 of Wheatland County’s MDP also provides a clear intent to adopt provisions from the land use bylaw (LUB). Following the NRCB Operational Policy 2016-7: *Approvals*, part 8.2.3, I also consider Wheatland County’s Land Use #2016-01 (with its last amendment on March 24, 2020, under Bylaw 2020-04). Under that bylaw, the subject land is currently zoned as Agricultural General District. Confined feeding operations are not listed as a permitted, discretionary or prohibited use. There is a general listing “Agricultural Operation” which does not require a permit. Section 4.2.7 of Part 4 specifies these as ‘an agricultural operation as defined in the Act on a parcel designated AG. This is understandable as Section 8.7 of the LUB states that the NRCB has full authority over CFOs and manure storage facilities, and that applicants/landowners are responsible for obtaining the necessary permits required by the NRCB under AOPA.

In the County’s response, Ms. Hayes requested that the development observes all applicable setbacks (3.05 m from side and rear property lines and 22.86 m from a road right-of-way). The new sheep barn meets all of these setbacks. I therefore determined that the development is consistent with the MDP and the county’s LUB.

Mountainview Colony's CFO is also in the area included in the Intermunicipal Development Plan (IDP) between Wheatland County and Rocky View County and therefore subject to this IDP. Wheatland County and Rocky View County adopted the latest revision to this plan in 2021 - November 30, 2021, by Rocky View County under Bylaw C-8164-2021 and November 16, 2021, by Wheatland County under Bylaw 2021-10.

The relevant land use policies can be found in section 3.3 – Land Use Policies, Agriculture, specifically section 3.3.3. This policy requires applications for new or expanded CFOs within the plan area to be referred to the adjacent municipality. Although this is not considered a land use policy, I sent a copy of the application to Rocky View County for comments because Rocky View County is within the 1.5 mile notification radius.

Map 3a indicates that the area in which Mountainview Colony is located is zoned Agriculture. No other policies in this IDP apply to this application.

## **APPENDIX B: Explanation of conditions in Authorization LA23027**

### **a. Groundwater protection requirements**

Mountainview Colony proposes to construct the new sheep barn with a 0.5 metre thick compacted soil liner.

Section 9 of AOPA's Standards and Administration Regulation specifies a maximum hydraulic conductivity for this type of liner in order to minimize leakage.

To demonstrate compliance with this standard, Mountainview Colony provided lab measurements of the hydraulic conductivity of the materials that will be used to construct the compacted soil liner.

Lab measurements of hydraulic conductivity are made in a precisely controlled setting and are typically based on a small soil sample. Therefore, the NRCB multiplies lab-measured hydraulic conductivity values by a factor of 10 to reflect the potential variability in actual liner materials and conditions that can reasonably be expected to be achieved in the field.

The regulations provide that the actual hydraulic conductivity of a 0.5 metre thick compacted soil liner must not be more than  $1 \times 10^{-7}$  cm/sec.

In this case, the lab measurement was  $7.26 \times 10^{-8}$  cm/sec. With the required ten-fold modification, the expected field value is  $7.26 \times 10^{-7}$  cm/sec. This expected value is above (worse than) the maximum value in the regulations. Therefore, the proposed liner meets needs to be thicker than 0.5 m with a minimum of 0.73 m to meet the hydraulic conductivity requirement in the regulations. Therefore, a condition is included requiring the compacted liner to be constructed with a minimum thickness of 0.73 m.

### **b. Construction Deadline**

Mountainview Colony proposes to complete construction of the proposed new sheep barn by December 31, 2025. This timeframe is considered to be reasonable for the proposed scope of work. The deadline of December 31, 2025, is included as a condition in Authorization LA23027.

### **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 LA23027 includes conditions requiring:

Mountainview Colony to submit a completion report, stamped by a professional engineer, certifying that the manure storage and collection portions of the sheep barn have been constructed in accordance with the proposed design. At a minimum, the report must confirm that the facility is constructed at the approved location, that all setbacks have been met, that it has been constructed with the same liner material as that used for hydraulic conductivity testing, liner thickness and compaction to proof that AOPA liner requirements have been met.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, these inspections must occur before livestock or manure are placed in the newly constructed facility. Authorization

LA23027 includes a condition stating that Mountainview Colony shall not place livestock or manure in the manure storage or collection portions of the new sheep barn until NRCB personnel have inspected the sheep barn and confirmed in writing that it meets the authorization requirements.