



Decision Summary LA21016

This document summarizes my reasons for issuing Authorization LA21016 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA21016. 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 March 10, 2021, Hutterian Brethren of Newell / Newell Colony Farming Co. Ltd. (Newell Colony) submitted a Part 1 application to the NRCB for a dairy barn extension and an increase in dairy numbers at an existing multi species CFO. An updated Part 1 was submitted on May 19, 2021 for only the extension to the dairy barn (calf barn portion) (49.68 m x 27.43 m), without the initially proposed animal numbers. The Part 2 application was submitted on May 19, 2021 and I deemed the application complete the same day.

a. Location

The proposed manure collection area (MCA) located at W½ 8-23-18 W4M in the County of Newell, roughly 18 km north of Bassano, Alberta. The topography of the site is undulating to rolling. The closest common body of water is the Crawling Valley Reservoir which is 4.7 km to the east.

b. Existing permits

The CFO is already permitted under Approval LA05002 and Authorizations LA06004, LA08013, and LA08030 allowing for 600 swine farrow to finish, 200 beef feeders, 100 milking cows (plus associated dries and replacements), 13,000 poultry layers, 2,000 poultry broilers, 100 turkeys, 1,400 ducks and 100 geese.

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
- any other municipality whose boundary is within a notification distance. In this case, the notification distance is 1.5 mile(s) (2.4 km) from the CFO.

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

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 Parks (AEP), Alberta Agriculture and Forestry (AF), Alberta Transportation, and the Eastern Irrigation District.

The NRCB received responses from Alberta Transportation. Ms. Leah Olson, a development/planning technologist stated in her response that a permit from her department is not required and that they have no concerns.

The NRCB did not receive any other responses.

4. Municipal Development Plan (MDP) consistency

I have determined that the proposed construction is consistent with the land use provisions of the County of Newell'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)
- Has sufficient means to control surface runoff of manure
- Meets the required AOPA setbacks from water wells, springs, and common bodies of water
- Meets AOPA groundwater protection requirements for the design of floors and liners/protective layers of manure storage facilities and manure collection areas

The exemption that is required to address the AOPA requirements around the distance to water wells is discussed in the following parts of this decision summary.

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." The County of Newell is an affected party (and directly affected) because the proposed dairy barn expansion is located within its boundaries.

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

Ms. Jackson also listed the setbacks required by the County of Newell's land use bylaw (LUB) but did not comment if the application meets these setbacks.

Wheatland County is also a directly affected party because Newell Colony is within 1.6 km of the boundary to the county. The NRCB did not receive a response from Wheatland County.

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.) 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 potential risks posed by Newell Colony's existing earthen liquid manure storage (EMS) was assessed in 2009. The assessment indicated that the potential risks to surface water and groundwater was low and the groundwater monitoring condition in LA06004 was suspended.

Since the 2009 risk assessment, a new version of the ERST was developed. For this reason, I reassessed the risks posed by the EMS using the updated version of the ERST. For the sake of efficiency, I only reassessed the CFO's existing EMS, the dairy barn, and the dry cow pens using the updated ERST. These appear to be the CFO's highest risk facilities, because the dairy barn is the closest CFO facility to the well, the EMS is the deepest manure storage facility, and the dry cow pens – being an open facility, has the highest potential to contaminate surface water. The assessment found that these facilities pose a low potential risk to groundwater and surface water. Because these are the CFO's highest risk facilities, I presume that the CFO's other existing facilities also pose a low potential risk to both groundwater and surface water. From a review of other information gathered in the course of this application, I am satisfied that the screening provided by the ERST is adequate and that the presumption is not rebutted. A further assessment of the risks posed by these other facilities, using the ERST, is not necessary.

New MSF/MCAs which clearly meet or exceed AOPA requirements are automatically assumed to pose a low risk to surface and groundwater. However, in this circumstance, the dairy barn extension is within 100 m of a water well. I therefore assessed this facility to determine the risk to groundwater and surface water and determined that it poses a low risk.

8. Exemptions

I determined that the proposed dairy barn expansion is located within the required AOPA setback from a water well. As explained in Appendix B, an exemption to the 100 meter water well setback is warranted due to construction of the dairy barn extension and location of the water well in respect to the barn extension. A water well monitoring condition is not required

(see Appendix B below and Technical Document LA21016).

9. Terms and conditions

Authorization LA21016 permits the construction of the dairy barn extension.

Authorization LA21016 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 LA21016 includes conditions that generally address the construction deadline, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

10. Conclusion

Authorization LA21016 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA21016.

Authorization LA21016 must be read in conjunction with Newell Colony's previously NRCB issued Approval LA05002 and Authorizations LA06004, LA08013, and LA08030 which remain in effect.

June 24, 2021

(Original signed)
Carina Weisbach
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemptions from water well setbacks
- C. Explanation of conditions in Authorization LA21016

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.)

Newell Colony’s CFO is located in the County of Newell and is therefore subject to that county’s MDP. The County of Newell adopted the latest revision to this plan on February 2013, under Bylaw # 1705-10, consolidated to Bylaw 1761-13.

The MDP policies relating to CFOs are in part 7. Section 7.1 states that the County “shall restrict the development of CFOs within the established urban fringe areas ...”

Newell Colony’s CFO is not located in any of the urban fringe areas designated in the MDP, so the proposal is consistent with this policy.

Section 7.2 states that the NRCB “should also consider” the following:

- Proximity to water bodies to minimize negative impact on drinking water supplies;
- The “cumulative effect of a new approval” on any area new other CFOs;
- Environmentally sensitive areas as shown on the report “environmentally Significant Areas of the County of Newell (1991)”;
- Giving notice to adjacent landowners even in case of application for authorizations.

Newell Colony’s CFO is not close to a common body of water.

The second of these four items does not apply because this permit is an expansion of an existing operation and therefore not a “new approval”. In addition, this provision is likely not a land use provision as it calls for site-specific discretionary judgements (viewed cumulatively with other existing CFOs), so it is not relevant to my MDP consistency determination. (See Operational Policy 2016-7: Approvals, part 8.2.5.)

As for the third item, the CFO is not located in an environmentally significant area as listed in the report and is therefore consistent with this policy.

As for the fourth item in section 7.2, this item is likely not a land use provision because of its focus on process and therefore does not need to be considered in my MDP consistency

determination. As explained above, the NRCB did notify the County of Newell, Wheatland County, and several referral agencies. With that the notification requirements under AOPA have been met.

Section 7.3 of the MDP states that the county “may use the MDS method to establish separation distances between proposed developments and CFOs.” This policy appears to refer to the “minimum distance separation” (MDS) requirements under AOPA. However, in several review decision, the NRCB’s board members have made it clear that approval officers should not consider MDP provisions that rely on or change the MDS formulas or MDS requirements under AOPA. That said, the county may still rely on this policy to set appropriate setbacks from proposed residential or other developments that the county regulates, from Newell Colony’s CFO.

Section 7.4 of the MDP states that the county “will impose a CFO exclusion zone” around the City of Brooks shown on the map in Appendix C. The applicant’s CFO is not located in the designated CFO exclusion area, so the application is consistent with this part of the plan.

Finally, section 7.5 of the MDP states that, as a “general guideline”. The county will use an 800 meter development setback from all reservoirs. However, this setback can be adjusted on a case-by-case basis depending on topography and other factors. As proposed, the dairy barn expansion meets this suggested setback of 800 meter to a reservoir and is therefore consistent with this policy.

For this reason, I conclude that the application is consistent with the land use provisions of County of Newell’s MDP.

Newell Colony is located within the zone to which the Intermunicipal Development Plan between County of Newell and Wheatland County (Bylaw No. 1830-15 consolidated to Bylaw No. 1926 and Bylaw No. 2018-30) applies. The IMDP policies relating to CFOs are in part 4, section 4.3.

Policy 4.3.1 states that existing CFOs located within the Plan Area will be allowed to continue to operate under acceptable operating practices and within the requirements of the Agricultural Operation Practices Act and Regulations. Newell Colony is an existing CFO and the proposed dairy barn extension meets all AOPA requirements.

Policy 4.3.2 requires the county to forward any application within the plan area to the other county. Although this is not a land use provision and is therefore not a part of my considerations to determine consistency of the application with the land use provision in this plan, I would like to note that a copy of the application was provided to Wheatland County for their review.

Following the NRCB Operational Policy 2016-7: Approvals, part 8.2.3, I also consider the County of Newell’s Land Use Bylaw # 1892-17 (consolidated to bylaw #1943-19 – April 2019). Under that bylaw, the subject land is currently zoned Agriculture. Although the land use bylaw does not explicitly mention CFOs (or intensive livestock operations) I would categorize it under ‘Agricultural operation’ which is a permitted use of land under that land zoning.

APPENDIX B: Exemption from natural water and well setbacks

1. Water Well Considerations

The proposed dairy barn extension is to be located less than 100 m from a water well. I have confirmed that one water well is located approximately 85 m from the dairy barn extension during a site visit and using aerial pictures. This is in conflict with the section 7(1)(b) of the *Standards and Administration Regulation (SAR)*. Section 7(2) 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)/manure collection area (MCA), or if required by an approval officer a groundwater monitoring program is implemented.

One basis for granting an exemption is if the “aquifer into which the well is drilled is not likely to be contaminated” by the proposed MSF or MCA.

Section 7(2) of the SAR states that the 100 m setback to a water well does not apply if the dairy barn extension is not likely to contaminate the aquifer into which the water well is drilled and if required by an approval officer, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the dairy barn extension is presumed to be low if the applicant’s proposed dairy barn extension 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 dairy barn extension

These presumptions and considerations are based on NRCB Operational Policy 2016-7: Approvals, part 8.7.1.

The water well is located approximately 85 m south of the dairy barn extension (water well ID #134424). This well is reported to have been installed in 1970 and has a perforated or screened zone from 47.24 m to 50.90 m below ground level. The well has an above ground casing and is located inside a well house. This well was drilled for domestic and livestock uses. I note that in my conversations with the applicant, the water well is presently used for livestock only. The well’s log identifies a protective layer from ground surface to 27.74 m below ground level and has no seal. It appeared to be in good condition at the time of my site inspection and its casing was protected by a welded steel cage.

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 likely as seen in Technical Document LA21016. Based on this, I am prepared to grant an exemption to the 100 m water well setback requirement for the dairy barn extension. A groundwater monitoring condition is not required.

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 LA21016

Authorization LA21016 includes several conditions, discussed below.

a. Construction Deadline

Newell Colony proposes to complete construction of the proposed dairy barn extension by December 31, 2023. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of December 31, 2023 is included as a condition in Authorization LA21016.

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 LA21016 includes conditions requiring:

- a. The concrete used to construct the liner of the manure collection and storage portion of the dairy barn extension 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. Newell Colony to provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the dairy barn extension.

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 facilities. Authorization LA21016 includes a condition stating that Newell Colony shall not place livestock or manure in the manure storage or collection portions of the dairy barn extension until NRCB personnel have inspected the dairy barn extension and confirmed in writing that it meets the authorization requirements.