

## Decision Summary RA20036

This document summarizes my reasons for issuing Authorization RA20036 under the *Agricultural Operation Practices Act (AOPA)*. Additional reasons are in Technical Document RA20036. 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 June 29, 2020, Len Congdon on behalf of Shirley, Marjorie and Len Congdon (the Congdon's) submitted a Part 1 application to the NRCB to expand an existing dairy CFO from 80 to 160 milking cows (plus associated dry cows and replacements).

The Part 2 application was submitted on May 31, 2021. It states that the amount of livestock currently permitted at the CFO will not be increasing from the 80 milking cows (plus associated dry cows and replacements). It should be noted that on September 29, 2009 the NRCB determined the grandfathered or deemed permit livestock capacity of this CFO as 80 milking cows plus associated dry cows and replacements.

The Part 2 application proposes to convert the current tie stall barn into a calf and heifer barn, to construct a new free stall dairy barn (55 m x 21.3 m, with an associated milk house and mechanical area) and to construct a new earthen liquid manure storage (EMS 54 m x 54 m x 5.5 m deep). With these new facilities, the manure from the milking cows will be switching from a solid storage system to a liquid storage system. On June 3, 2021, I deemed the application complete.

The proposed construction of the milk house and mechanical area are "ancillary structures," under section 1(1)(a.1) of the Agricultural Operations, Part 2 Matters Regulation, because they will not be used to store or collect manure or to confine livestock. Therefore, under section 4.1 of that regulation, these structures do not need to be permitted under the act.

#### a. Location

The CFO is located at NE 13-42-20 W4M in Camrose County, roughly 11 km northwest of the Village of Donald. The terrain is characterized by rolling hills and wetlands. The nearest wetland to the CFO is a common body of water (slough) that is located approximately 35 m to the west of the dairy's existing pens.

#### b. Existing permits

As the CFO existed on January 1, 2002, the CFO is grandfathered with a deemed registration under section 18.1 of AOPA. The deemed registration allows for the construction and operation of an 80 milking cow dairy (plus associated dry cows and replacements) CFO. The determination of the CFO's deemed permit status under section 18.1 of AOPA is explained in

the letter from the NRCB to Shirley Congdon dated September 29, 2009. The CFO's deemed facilities are listed in Technical Document RA20036.

## **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
- any other municipality whose boundary is within a notification distance. In this case, the notification distance is 0.5 miles from the CFO

A copy of the application was sent to Camrose County, which is the municipality where the CFO is located. A copy was not sent to other municipalities as the CFO is not located within 0.5 miles of another municipality and it is not located within 100 m of the 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 Parks (AEP), and Alberta Agriculture and Forestry (AF).

I also sent a copy of the application to Hunt Oil Company of Canada Inc., Altagas Utilities Inc., and PwC Canada (on behalf of Trident Exploration (Alberta) Corp.) who are noted on the land title as right of way owners at NE 13-42-20 W4M.

Ms. Laura Partridge, a senior water administration officer with AEP, stated that additional water licensing is not required and did not raise concerns with this application.

Mr. Stephan Desilets, the manager of inspections with the Inspection and Investigation section of AF, indicated that the referral was forwarded to the local inspector with AF for review; if that inspector had any concerns he would be in contact with the NRCB. To date I have not received correspondence from the local inspector related to this file.

I did not receive responses from AHS or the above noted right of way owners.

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

I have determined that the proposed barn and EMS are 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 new barn and EMS:

- Meet 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 springs, and common bodies of water
- Has sufficient means to control surface runoff of manure
- Meets AOPA groundwater protection requirements for the design of liners and protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part nine, the application meets all relevant AOPA requirements with exception to the setback to water well requirement to the proposed barn. An exemption to the water well setback requirement is warranted to the proposed barn and is discussed in the following parts of this decision summary.

## **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. Not all affected parties are “directly affected” under AOPA.

Municipalities that are affected parties are identified by the act as “directly affected.” Camrose County is an affected party (and directly affected) because the proposed barn and EMS are located within its boundaries.

Camrose County did not provide a response to this application. The application’s consistency with Camrose County’s municipal development plan is addressed in Appendix A, attached.

## **7. Environmental risk of facilities**

As part of my review of this application, I assessed the risk to the environment posed by the CFO’s existing manure storage facilities and manure collection areas. I used the NRCB’s environmental risk screening tool (ERST) to assist in my assessment of risk to surface water and groundwater (see NRCB Operational Policy 2016-7: Approvals, part 8.13). The tool provides for a numeric scoring of risks, which can fall within 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).)

The ERST indicated that the pens that drain toward the slough pose a moderate potential risk to surface water and a low potential risk to ground water. Because of this, I consulted with the chair of the NRCB’s Monitoring Review Team regarding the severity of the risk and options to address it. In my view, the risks posed by the pens draining towards the slough are addressed by the condition explained in Appendix C. The pens draining away from the slough pose a low potential risk to surface water and groundwater. Because of this, I presume that the remaining facilities all pose a low potential risk to surface water and groundwater.

The proposed barn and EMS both pose a low potential risk to surface water and groundwater.

## **8. Exemption**

I determined that the proposed barn is located within the required AOPA setback from a water well. As explained in Appendix B, an exemption to the 100 m water well setback is warranted due to the liner proposed for the barn’s manure collection areas (scrape alleys) and manure storage facility (pit) and how the water well was constructed.

## **9. Terms and conditions**

Authorization RA20036 permits the construction of the free stall dairy barn and EMS.

Authorization RA20036 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 RA20036 includes conditions that generally address construction deadlines, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

## **10. Conclusion**

Authorization RA20036 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA20036.

Authorization RA20036 must be read in conjunction with the Congdon's deemed registration which remains in effect.

July 16, 2021

(Original Signed)  
Jeff Froese  
Approval Officer

## **Appendices:**

- A. Consistency with the municipal development plan
- B. Exemption from water well setbacks
- C. Explanation of conditions in Authorization RA20036

## **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.)

This 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. The portions of the MDP relevant to this application are discussed below:

Policy 4.3.7 of the MDP states that applications for new or expanding CFOs shall meet the *Agricultural Operations Practices Act*.

This is not a land use provision. I note that, as discussed elsewhere in this decision summary, this application meets all relevant AOPA requirements with exception to the setback to a water well. As discussed previously and in the following appendix, an exemption to the water well setback requirement is warranted.

Policy 4.3.8 states that at the discretion of County Council, large CFOs shall be prohibited in the County.

This policy likely is not a “land use provision” because it calls for discretionary judgements (by Council) about the size of the CFO. The MDP does not define what qualifies as a large CFO. Further, section 8.2.5 of the NRCB’s Approvals Policy (Policy 2016-7) and section 22(2.1) of AOPA prohibit me from considering this policy as part of this MDP consistency determination.

Policy 4.3.9 states that development of new or expanding CFOs shall not be supported within 3,219 m (2 miles) of the City of Camrose, 3,219 m (2 miles) from any recreational lake (defined in the MDP as Miquelon Lake, Little Beaver Lake, Bittern Lake, Red Deer Lake, Buffalo Lake, and Dried Meat Lake) or 1,610 m (1 mile) from any other urban municipality or hamlet as outlined in an [intermunicipal development plan] IDP.

This CFO is not located within any of the above stated setbacks and is beyond the extents of Camrose County’s IDPs.

For the above reasons, I have determined that this application is consistent with the land use provisions of Camrose County’s MDP.

## APPENDIX B: Exemption from water well setback

The proposed free stall dairy barn is to be located less than 100 m from a water well or water wells. I have confirmed that one water well is located approximately 85 m from it during a site visit and through review of site plans and scaled air photos. 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 proposed barn (a MSF/MCA) 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 MSF/MCA are presumed to be low if the applicant’s proposed MSF/MCA 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 MSF/MCA
- d. Whether the well is up- or down-gradient from the MSF/MCA and whether this gradient is a reasonable indication of the direction of surface and groundwater flow between the two structures

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

The water well:

Based on information provided by the applicant and from the Alberta Environment and Parks (AEP) water well database, the water well located approximately 85 m north of the proposed free stall dairy barn is likely AEP water well ID #1200409. This well is reported to have been installed in 2003 and has a perforated or screened zone from 67.1 m to 85.3 m below ground level across coal, sandstone and shale layers. The well has an above ground casing and is used for domestic and non-domestic purposes. The well’s log identifies protective layer of blue till from ground surface to 52.1 m below ground level. The well has a driven seal at 54.9 m across a shale layer. The well appeared to be in good condition at the time of my site inspection. I was unable to determine if this well is up or down gradient to the CFO with regards to groundwater flow.

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.<sup>1</sup>

In this case, the results of the water well exemption screening tool suggest that an exemption is likely as seen in Technical Document RA20036. Based on this, I am prepared to grant an exemption to the 100 m water well setback requirement for the new free stall barn.

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1. 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).

## **APPENDIX C: Explanation of conditions in Authorization RA20036**

Authorization RA20036 includes several conditions, discussed below:

### **a. Surface water (slough) protection requirements**

As noted in this decision summary and Technical Document RA20036, the pens draining towards the slough pose a moderate potential risk to surface water that warrants actions being taken. For this reason, and consistent with NRCB practice, it is necessary for the Congdons to address this risk. Therefore, a condition is included in Authorization RA20036 requiring the Congdons to submit a written plan acceptable to the NRCB within six months of the issuance of this permit that will address that risk posed to surface water. This plan must detail how this will be done within a three year timeline. That plan and any actions resulting from that plan must be approved by the NRCB in writing. Once the plan is approved by the NRCB in writing, it must be implemented, unless otherwise directed by the NRCB in writing.

### **b. Construction Deadline**

The Congdon's propose to complete construction of the new facilities by November 2024. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of November 29, 2024 is included as a condition in Authorization RA20036.

### **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 RA20036 includes conditions requiring:

- a. the Congdons to provide a completion report, prepared by a qualified third party, certifying the EMS's horizontal and vertical dimensions including side wall slopes.
- b. the concrete used to construct the liner of the manure collection and storage portion of the new free stall dairy barn to meet the specifications for category B (liquid manure shallow pits) in the pits and category C (solid manure – wet) in the scrape alleys in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas."

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 RA20036 includes conditions stating that the Congdon's shall not place livestock or manure in the manure storage or collection portions of the new facilities until NRCB personnel have inspected them and confirmed in writing that they meet the authorization requirements.