

Decision Summary RA20018

This document summarizes my reasons for issuing Approval RA20018 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA20018. 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.

1. Background

On March 13, 2020, Hutterian Brethren Church of Donalda (Donalda Colony) submitted a Part 1 application to the NRCB to expand the poultry portion of an existing multi species CFO. The Part 2 application was submitted on March 19, 2020. On April 16, 2020, I deemed the application complete.

The proposed CFO expansion includes the construction of a new layer chicken barn (97 m x 25 m) to house 35,000 layer chickens. It also proposes to repurpose the existing layer chicken barn into a pullet barn which will house 40,000 pullet chickens. The repurposing of the old layer chicken barn into a pullet barn will not require any modifications to the barn's existing manure collection and storage liner.

Under AOPA, this type of application requires an approval. (This is one of several types of "permits" issued under AOPA. For an explanation of the different types and when each one applies, see www.nrcb.ca.)

a. Location

The existing CFO is located at W 1/2 18-42-17 W4M & SW 19-42-17 W4M in the County of Stettler, roughly 9 km northeast of the village of Donalda, Alberta. The terrain surrounding the CFO gently undulates and in general slopes to the south.

b. Existing permitted facilities and livestock

The CFO is currently permitted under NRCB Approval RA15023A. Approval RA15023A allowed for the construction of a dry cow and young stock barn, consolidated Approval RA15023 and Authorization RA16049 into one permit, and in general allows the construction and operation of a multi species CFO with 120 milking cows (plus associated dries and replacements), 200 ducks/geese, 400 turkeys, 209 sheep, and 7,700 layer chickens. The CFO's existing permitted facilities are listed in the Appendix to Approval RA20018.

c. Other existing facilities and livestock

As part of the review of Application RA15023, and the issuance of Approval RA15023, a determination of Donalda Colony's deemed permit status (the grandfathered livestock and manure collection and storage facilities that existed as of January 1, 2002) was made. Two facilities, a turkey pen and a series of sheep pens, were reviewed and environmentally risk screened. However, due to clerical error, these facilities were not included in the listing of the CFO's existing permitted manure collection and storage facilities. To address this error, these facilities will be included in the Appendix to Approval RA20018 where the CFO's existing permitted facilities are listed.

Also in Approval RA15023 and subsequent Approval RA15023A, there is also an error in the permitted livestock category (poultry) and type (ducks and geese). Two hundred ducks/geese is stated, and both are types of the poultry livestock category. This is in error as specific numbers within a livestock type should be typically stated.

Based on a conversation with a representative of Donalda Colony, it was confirmed that the colony typically has about 200 geese or 350 ducks present at any given time (not both). To address this oversight in Approval RA20018 from RA15023A, the amount of permitted livestock stated will be revised to state that the amount of permitted livestock is 200 geese.

Donalda Colony will have the option to switch to 350 ducks rather than 200 geese, if they wish to, after notifying the NRCB. Section 2 (2) and (3) of the *Agricultural Operations, Part 2 Matters Regulation* allows a CFO operator to switch between livestock types within a category (without requiring an amendment to their approval), provided that the annual amount of manure produced does not increase and provided that an approval officer is notified before the change occurs. Based on this, the presence of 200 geese or 350 ducks at any given time at the CFO would not be in conflict with AOPA.

2. Notices to affected parties

Under section 19 of AOPA, the NRCB is required to notify (or direct the applicant to notify) all parties that are “affected” by an approval application. Section 5 of the *Agricultural Operation, Part 2 Matters Regulation* defines “affected parties” as:

- the municipality where the CFO is or is to be located
- any other municipality whose boundary is within a specified distance from the CFO, depending on the size of the CFO
- all persons who own or reside on land within a specified distance from the CFO, depending on the size of the CFO

For this application, the distance is one mile. (The NRCB refers to this distance as the “affected party radius.”)

Municipalities that are affected parties are defined by the act to be “directly affected” and are entitled to provide evidence and written submissions. County of Stettler is an affected party (and therefore also a directly affected party) because the CFO is located within its boundaries.

All other parties who receive notice of the application may request to be considered “directly affected.” Under NRCB policy, all individuals who own or reside on land within the affected party radius are presumed to be “directly affected” if they submit a written response to the notice within the prescribed timeline. See NRCB Operational Policy 2016-7: *Approvals*, part 6.2.

Under section 20 of the act, all directly affected parties are entitled to a reasonable opportunity to provide evidence and written submissions regarding the application.

All directly affected parties are also entitled to request an NRCB board review of the approval officer’s decision on the approval application.

The NRCB published notice of the application in the Stettler Independent on April 16, 2020 and posted the full application on the NRCB website for public viewing. The NRCB also emailed referral letters and a copy of the complete application to County of Stettler, Alberta Health

Services (AHS), Alberta Environment and Parks (AEP), Alberta Transportation, and the Battle River Power Coop. Five courtesy letters were sent to people identified by County of Stettler as owning or residing on land within the affected party radius.

3. Responses from the municipality, referral agencies and other parties

I received responses from the county, AHS and AEP. No response was received from Alberta Transportation, the Battle River Power Coop, or other parties.

Ms. Jacinta Donovan, the director of planning services with the County of Stettler, provided a written response on behalf of the County of Stettler. As noted in section 2, the County of Stettler is a directly affected party.

Ms. Donovan stated that the application is consistent with the County of Stettler's municipal development plan. The application's consistency with the County of Stettler's municipal development plan, is addressed in Appendix A, attached.

Ms. Donovan's response also listed the setbacks required by County of Stettler's land use bylaw (LUB) and noted that the application meets those setbacks.

Mr. Quentin Schatz, a public health inspector/executive officer with AHS, indicated in his response to this application that water wells which do not meet a 90 day residence prior to entering an aquifer, that are shallower than 13.7 m, and are located within 100 m of manure collection or storage facilities should be decommissioned and adequate replacement water wells should be drilled. He also indicated that new water wells are not to be installed within 100 m of manure collection or storage areas. Provided that these requirements are met, AHS has no objection to this application.

I did not confirm if the two water wells located within 100 m of the proposed barn meet Mr. Schatz's requirements. However, I do note that the proposed barn is to have a concrete manure collection and storage liner that meets AOPA requirements. In addition, the proposed barn presents a low risk to groundwater based on ERST screening results (see Part 4, below). It also warrants an exemption to the 100 m water well setback requirement under AOPA (see Appendix B).

Ms. Laura Partridge, a senior water administration technologist with AEP, indicated that water licensing applications are outstanding and that the AEP's compliance section has been notified of this matter. She then directed the applicant to submit new license applications on or before August 20, 2020.

As noted in the letter to the referral agencies (including AHS and AEP), which sought their input on this application, it was advised that I (as an approval officer under AOPA) can only consider comments related to this application that apply under AOPA. I am unable to enforce rules and regulations under other legislation. Matters not under AOPA jurisdiction should be followed up on by the agency identifying those concerns. Irrespective, I have provided a copy of the AHS and AEP responses to the applicant for their information.

4. Environmental risk screening of existing and proposed facilities

When reviewing new approval applications for an existing CFO, NRCB approval officers normally assess the CFO's existing buildings, structures, and other facilities, using the NRCB's environmental risk screening tool to help determine the level of risk they pose to surface water

and groundwater. This tool 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 done 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 Donalda Colony's existing CFO facilities were assessed in 2015, 2016 and 2017. Those assessments indicated that the risks to surface water and groundwater were low, with exception to the dairy corrals which posed a moderate risk to surface water and the turkey and sheep pens that posed a high risk to groundwater. The risks posed by these facilities are addressed by the conditions in Approval RA15023A. The conditions in Approval R15023A will be carried forward into the new permit.

I assessed the proposed new barn using the NRCB's risk screening tool, and determined that it poses a low potential risk to groundwater and surface water.

5. Other factors considered

With exception to the proposed barn's location in relation to local water wells, the application meets all relevant AOPA requirements, with the terms and conditions summarized in part 6.

In addition, the proposed CFO expansion is consistent with the land use provisions of the County of Stettler's municipal development plan and land use bylaw. (See Appendix A for a more detailed discussion of the county's planning requirements.)

With respect to the act's technical requirements, the proposed CFO expansion:

- 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 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 liners of manure storage facilities

I also determined that the proposed barn is located within the required AOPA setback from two existing water wells. However, as explained in Appendix B, this facility warrants an exemption from the 100 m water well setback due to the wells' construction and location.

In addition, I assessed the effects of the proposed CFO expansion on the environment. Consistent with NRCB policy, I presumed that these effects are acceptable because the application meets all of AOPA's technical requirements (aside from the setback to water wells noted above) and in my opinion directly affected parties' concerns (none were expressed related to this application) have been addressed. I also presumed that the application's effects on the economy and community are acceptable, and that the proposed CFO expansion is an appropriate use of land. Under NRCB policy, these presumptions are based on the application's consistency with the municipal development plan and land use bylaw. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.7.3.) I have not noted anything in my review of this application,

during my site inspection, the NRCB file or the responses to the application that rebuts these presumptions.

6. Terms and conditions

Approval RA20018 specifies the new permitted livestock capacity as 120 milking cows (plus associated dries and replacements), 200 geese, 400 turkeys, 209 sheep, 35,000 layer chickens and 40,000 chicken pullets; it also permits the construction of the new barn and the conversion of the existing layer barn into a pullet barn.

Approval RA20018 also contains terms that the NRCB generally includes in all AOPA approvals, 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, Approval RA20018 includes conditions that:

- Set a deadline of September 30, 2021 for the approved construction to be completed
- Require the submission of proof, prepared by a qualified third party, that the concrete used to construct the liner of the manure collection and storage portion of the new barn to be sulphate resistant and to have a minimum 56-day compressive strength of 32 MPa
- Prohibit Donalds Colony from placing manure or livestock in the new barn until it has been inspected by the NRCB following its construction

For an explanation of the reasons for these conditions, see Appendix C.

a. Conditions carried forward from previously issued permits

For clarity, and pursuant to NRCB policy, I consolidated Approval RA15023A into Approval RA20018 (see NRCB Operational Policy 2016-7: *Approvals*, part 10.5). Consolidating permits generally involves carrying forward all relevant terms and conditions in the existing permits into the new permit, with any necessary changes or deletions of those terms and conditions, and then cancelling all existing permits once the new permit is issued. This consolidation is carried out under section 23 of AOPA, which enables approval officers to amend AOPA permits on their own motion.

Therefore, in addition to containing the new terms and conditions summarized above, Approval RA20018 includes all existing terms and conditions in Approval RA15023A with minor revisions, except the construction or decommissioning conditions that are already met. Those conditions will be carried forward but are identified and included in an appendix to the new approval.

7. Conclusion

Approval RA20018 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA20018.

Approval RA15023A is therefore cancelled, unless Approval RA20018 is held invalid following a review and decision by the NRCB's board members or by a court, in which case it will remain in effect.

June 19, 2020

(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 Approval RA20018

APPENDIX A: Consistency with the municipal development plan

Under section 20 of AOPA, an approval officer may approve an application for an approval only if the approval officer finds that the application is consistent with the “land use provisions” of the applicable municipal development plan (MDP).

The NRCB interprets the term “land use provisions” as covering MDP policies that provide generic directions about the acceptability of various land uses in specific areas and that do not call for discretionary judgements relating to the acceptability of a given confined feeding operation (CFO) development. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.2.5.) Under this interpretation, the term “land use provisions” also excludes MDP policies that impose procedural requirements. In addition, section 20(1.1) 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.”)

Donalda Colony’s CFO is located in the County of Stettler and is therefore subject to that county’s MDP. The County of Stettler adopted the latest revision to this plan on June 25, 2014, under Bylaw #1529-14. Section 4.15 of the MDP deals specifically with CFOs. The relevant subsections of this section to this application are discussed below.

Subsection 4.15(d) states that the CFO site “must be located” in either the Agricultural District or the Agricultural Preserve District under the county’s land use bylaw, otherwise the county will ask the NRCB to include a condition in the permit requiring the applicant to obtain rezoning from the county. This CFO is located within the Agricultural District. Therefore, this application is consistent with this MDP policy.

Subsection 4.15(e) states that the “proposed location of a CFO structure must comply with the minimum front, side and rear yard setbacks for farm buildings as described in the land use bylaw.” This is likely not a land use provision as it calls for site specific information. I am of the opinion that this subsection is a test or condition and as noted above shouldn’t be considered as part of my MDP consistency analysis. Regardless, the proposed barn meets the setbacks in the County’s land use bylaw.

Subsection 4.15(f) states that the county *may* request that the NRCB include a condition in the permit requiring the applicant to enter into a road use agreement with the county. This is likely not a land use provision. Nevertheless, the county has made no such request for this application. Further, NRCB policy is not to use AOPA permit conditions to require applicants to enter into road use agreements. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.9.)

Subsections 4.15(h) and (i) preclude new or expanding CFOs within any exclusion zones identified in an intermunicipal development plan or in any area structure, concept and outline plans listed in those subsections. This CFO is not within any of these exclusion zones.

For the reasons stated above, I conclude that the application is consistent with the land use provisions of the County of Stettler’s MDP. This conclusion is supported by the county’s response letter, which stated that the application is consistent with its MDP.

In my view, the text of the County of Stettler’s MDP also provides a clear intent to adopt provisions from the land use bylaw (LUB), in sections 1.0, 3.6, 4.1, 4.7, 4.15, and 4.16. Following the NRCB Operational Policy 2016-7: *Approvals*, part 8.2.3, I also considered the

County of Stettler's Land Use Bylaw #1602-18 (most recently amended on November 6, 2019). Under that bylaw, the subject land is currently zoned as Agricultural District.

CFOs are not listed as permitted or discretionary land uses within the Agricultural District. The LUB provides further direction on this in section 8.1 where CFOs are exempted from the definition of agricultural operations. However, section 91.14 of the bylaw states that the county "supports the location" of CFOs in the Agricultural District, if they "comply with the relevant policies" in the county's MDP, particularly, the exclusion zones cross-referenced in the inter-municipal development plans, and around approved area structure plans, concept plans and outline plans. The county's response to this application indicated that the subject property is not located within any areas covered by area structure plans or intermunicipal development plans. On this basis, I am of the opinion that the CFO does not conflict with the LUB.

APPENDIX B: Exemption from water well setbacks

The application did not specify if any water wells are located within 100 m of the proposed barn. I have confirmed that two water wells are located within 100 m of it based on a review of site plans, air photos and through a site visit.

Because of this proximity, the applicant's proposed barn conflicts with a regulation under AOPA, which prohibits the construction of manure storage facilities (MSFs) or manure collection areas (MCAs) within 100 m of water wells.¹ However, the regulation allows approval officers to grant an exemption from this prohibition. I must therefore consider whether an exemption is appropriate in this instance.

Under the regulation, the test for granting an exemption is whether the "aquifer into which the well is drilled is not likely to be contaminated" by the proposed MSF and MCA. (According to the regulation, when granting an exemption, an approval officer may require the applicant to implement a "groundwater monitoring program.")

The regulation also makes it clear that the applicant has the burden of proving that an exemption is warranted.

In considering whether an applicant has met that burden, approval officers presume that the risks of direct aquifer contamination from the MSF are low if the applicant's proposed MSF meets AOPA's technical requirements to control runoff and leakage. However, when determining whether an MSF that meets AOPA's technical requirements should be exempted from the 100 metre water well setback requirement, approval officers also assess whether water wells that are less than 100 metres from the MSF could act as conduits for aquifer contamination.

Approval officers assess the following factors to determine the risk of aquifer contamination via the water well:

- How the well was constructed
- Whether the well is being properly maintained
- The distance between the well and the proposed MSF
- The estimated water well pumping rate
- Whether the well is up- or down-gradient from the MSF 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 first water well is located approximately 60 m west of the proposed barn and west of the existing layer chicken barn. Based on information provided by the applicant and from the Alberta Environment and Parks (AEP) water well database, this well is likely ID # 105424. This well is reported to have been installed in 1988 and has a perforated zone from 11.9 m to 17.7 m below ground level across coal and shale layers. These layers produce approximately 55 litres per minute of water and are reported to be used for livestock purposes. (The applicant confirmed that this water well is used for livestock purposes only.) The well's log identifies a shale layer from 0.6 m to 8.5 m below ground level. The well has a driven seal from ground surface to 10.7

1. *Standards and Administration Regulation*, Alta. Reg. 267/2001, section 7(1)(b).

m below ground level. The well appeared to be in good condition at the time of my site visit and its casing was protected by a concrete structure that extended well above ground level. The well is located approximately 60 m from and at the same approximate level as the proposed barn.

The second water well is located approximately 30 m south of the proposed barn. Based on information provided by the applicant and from the Alberta Environment and Parks (AEP) water well database, this well is likely ID # 294440. This well is reported to have been installed in 2000 and has a perforated zones from 11.0 m to 17.1 m and from 23.2 m to 28.4 m below ground level across shale and coal layers. These layers produce approximately 36 litres of water per minute and are reported to be used for other purposes. (The applicant confirmed that this water well is also used for livestock purposes only.) The well's log identifies a clay layer from ground surface to 4.9 m below ground level. The well has a bentonite seal from ground surface to 7.6 m below ground level. This well also appeared to be in good condition at the time of my site visit. Akin to water well 105424 noted above, this well was also protected with a concrete structure. The well is located approximately 30 m from and at the same approximate elevation as the proposed barn.

An exemption to the 100 m setback to these wells is warranted as the proposed barn is unlikely to be a source of aquifer (the uppermost groundwater resource) contamination. The barn poses a low potential risk to groundwater when risk screened using the NRCB's environmental risk screening tool (see part four [above] and Technical Document RA20018).

In addition, 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 and to decide whether an exemption from the 100 metre setback to a well is warranted.² This tool consists of a two-stage risk screening process; each stage provides a numeric risk "score" based on the information inputted into the tool. The first stage focuses on the well's construction. If the well scores less than 10 at this stage, the tool suggests granting a setback exemption for the subject facility. If the well scores above 28, the tool recommends denying the exemption. Scores between 10 and 28 require applying the second stage of the screening process, which focuses on the gradient and other factors bearing on the risk of manure runoff or leachate reaching the water well. If the risk score at this stage is over 20, the tool suggests denying the setback exemption to the subject well.

For the risk screening process described above, water well 105424 scored 18 in both the primary and secondary risk screening assessments. Water well 29440 scored 13 and 19 in the first and second risk screening stages, respectively.

Based on the above risk scores and discussion, an exemption to the 100 m setback requirement is warranted for the proposed barn.

2. 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 Approval RA20018

Approval RA20018 includes several conditions, discussed below, and carries forward a number of conditions from Approval RA15023A.

1. New conditions in Approval RA20018

a. Construction Deadline

Donalda Colony proposes to complete construction of the proposed new barn by September 2021. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of September 30, 2021 is included as a condition in Approval RA20018.

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, Approval RA20018 includes conditions requiring the submission of proof, prepared by a qualified third party that the concrete used to construct the liner of the manure collection and storage portion of the new barn to be sulphate resistant and to have a minimum 56-day compressive strength of 32 MPa.

The NRCB routinely inspects newly constructed facilities to assess whether they 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. Approval RA20018 includes a condition stating that Donalda Colony shall not place livestock or manure in the manure storage portions of the new barn until NRCB personnel have inspected it and confirmed in writing that it meets the approval requirements.