

Decision Summary LA20014

This document summarizes my reasons for issuing Registration LA20014 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA20014. 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 5, 2020, the Hutterian Brethren Church of Granum (Granum Colony) submitted a Part 1 application to the NRCB to construct a new poultry CFO. On June 23, 2020 an updated Part 1 and a complete Part 2 application was submitted for 20,000 chicken layers (no pullets included); and a chicken layer barn (78.5 m x 16.2 m) with attached manure storage area (18.3 m x 14.9 m). On June 30, 2020, I deemed the application complete.

There are several existing cow calf pens at this location. These pens are part of a seasonal feeding and bedding site and are not considered a CFO. The north pens will be decommissioned to construct the chicken layer barn.

The dimensions of the proposed chicken layer barn also include an office and egg room. These 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, this part of structure does not need to be permitted under the act. However, for consistency purposes I continued to consider these areas as part of the chicken layer barn with attached manure storage area.

Under AOPA, this type of application requires a registration.

a. Location

The proposed CFO is located at SE 25-11-28 W4M in the Municipal District (MD) of Willow Creek, roughly 9 km southwest of the Town of Claresholm, Alberta. The terrain is generally hilly. The area of the proposed development is slightly sloping to the north and east with a steep creek bank down to Meadow Creek, approximately 85 m to the west.

2. Notices to affected parties

Under section 21(1) of AOPA, the approval officer must notify all “affected parties” of a registration application. Section 5 of AOPA’s Part 2 Matters Regulation lists the categories of municipalities that are affected parties. These categories include the municipality where the proposed CFO is located. The MD of Willow Creek is an affected party under the Part 2 Matters Regulation, because the proposed CFO is within its borders.

Under section 21(1) of the act, affected parties also include owners and occupants of land that is within the “minimum distance separation” or 0.5 miles from the parcel of land where the CFO is proposed to be located, whichever distance is greater. (The NRCB refers to this distance as the “affected party radius.”)

Under section 21(3) of the act, all affected owners and occupants of land are entitled to provide written submissions regarding whether the application meets the requirements of the regulations under the act. (The NRCB interprets this section as implying that it includes municipalities. See Operational Policy 2016-7: *Approvals*, part 7.11.2.)

Under section 21(2) of the act, affected municipalities are automatically also considered “directly affected” parties. Under section 21(3), all owners or occupiers of land who are affected parties may apply for a determination as to whether they are directly affected parties. However, under NRCB policy, all affected parties 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.

All directly affected parties are entitled to request that the NRCB’s board members review the approval officer’s decision on the registration application.

The NRCB published notice of the application in the Claresholm Local Press on June 30, 2020 and posted the full application on the NRCB website for public viewing. The NRCB also emailed referral letters and a copy of the application to the MD of Willow Creek; Alberta Health Services (AHS); Alberta Environment and Parks (AEP); and Alberta Transportation. Fourteen courtesy letters were sent to people identified by the MD of Willow Creek as owning or residing on land within the affected party radius.

3. Responses from the municipality and referral agencies

I received responses from the MD of Willow Creek, AEP, Alberta Transportation, and AHS.

Mr. Glen Alm, chair of the Municipal Planning Commission with the MD of Willow Creek, provided a written response on behalf of the MD of Willow Creek. As noted in section 2, the MD of Willow Creek is a directly affected party.

Mr. Alm did not comment if the application is consistent with the MD of Willow Creek’s municipal development plan but voiced several concerns with this development. Those concerns, and the application’s consistency with the MD of Willow Creek’s municipal development plan, are addressed in Appendices A and C, attached.

The NRCB also received a response from Jeff Gutsell, Hydrogeologist with AEP, Carol Brittain, public health inspector and land use specialist with AHS, and Leah Olson, planning technologist with Alberta Transportation.

Mr. Gutsell noted that the applicant has chosen Option 3 of the declaration if a water licence from AEP is needed. He stated that there is no active water licence that would cover the water needs for a 20,000 head chicken layer operation and that his department has not yet received an application for a water licence. He requested that Granum Colony provides AEP with proof that adequate water is available prior to the construction of the facility. Because water is directly regulated by AEP, I will not further discuss this issue. However, a copy of AEP’s concerns was

forwarded to Granum Colony for their information and action. The applicant is reminded that it is his responsibility to acquire all applicable permits and licences.

Ms. Brittain stated in her response, that all efforts should be made to protect drinking water sources during construction and operation of the facility and that water testing of drinking water should be conducted.

Ms. Olsen stated in her response that a permit from Alberta Transportation is not required and that her department does not anticipate an appreciable impact on the provincial highway system from this development.

4. Responses from other directly affected parties

The NRCB received responses from 39 individuals.

However, the NRCB received one of these submissions after the submission deadline in the notice. Therefore, I cannot consider if the author (Ms. L. Culham) of this submission would qualify to be a directly affected party and did not consider and address her submission in my permit decision. However, her concern is similar in nature to the concerns raised by other individuals.

Of the 38 people who submitted responses, nine own or reside on land within the 0.5 mile radius for affected persons. Because of their location within this radius, they are presumed to be directly affected by the application.

Twenty-nine of the respondents do not own or reside on land within the 0.5 mile radius for affected persons. These 29 respondents are not considered to be directly affected by the registration application. Appendix B sets out my reasons for this determination.

The directly affected parties raised concerns regarding surface and groundwater contamination, manure spreading lands, dead disposal, traffic, and nuisance related issues (see Appendix C for further details).

5. Environmental risk screening of proposed facilities

As part of my review of this application, I assessed the risk to surface water and groundwater posed by the CFO's existing and proposed manure storage facilities. I used the NRCB's environmental risk screening tool for this purpose (see NRCB Operational Policy 2016-7: *Approvals*, part 8.13). The tool 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.)

The proposed facility (chicken barn with attached manure storage area) poses a low potential risk to groundwater and surface water.

6. Other factors considered

The application meets all relevant AOPA requirements, with the terms and conditions summarized in part 7.

In addition, the proposed CFO is consistent with the land use provisions of the MD of Willow Creek's municipal development plan and with the MD of Willow Creek's 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:

- Meets the required AOPA setbacks from all nearby residences (AOPA setbacks are known as the "minimum distance separation" requirements, or MDSH)
- 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 liners of manure storage facilities

As required by section 4(1) of the South Saskatchewan Regional Plan (SSRP), I considered that document's Strategic Plan and Implementation Plan and determined that the application is consistent with those plans. In addition, there are no notices or orders under the Regulatory Details portion of the SSRP that apply to this application.

7. Terms and conditions

Registration LA20014 specifies the new permitted livestock capacity as 20,000 chicken layers and permits the construction of the new chicken layer barn with attached manure storage area.

Registration LA20014 also contains terms that the NRCB generally includes in all AOPA registrations, 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, Registration LA20014 includes conditions that:

- Set a deadline of December 31, 2023 for the approved construction to be completed
- Require the concrete used to construct the liner of the manure collection and storage portion of the chicken layer barn with attached manure storage 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"
- Require written confirmation from a qualified third party that the concrete used for the manure collection and storage areas meets the required specifications
- Prohibit Granum Colony from placing manure or livestock in the chicken layer barn with attached manure storage area until the facility has been inspected by the NRCB following its construction
- Require Granum Colony to spread manure in the fall and that all manure has to be incorporated

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

8. Conclusion

Registration LA20014 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA20014.

July 26, 2020

(Original signed)
Carina Weisbach
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Determining directly affected party status
- C. Concerns raised by referral agencies and directly affected parties
- D. Explanation of conditions in Registration LA20014

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may approve an application for a registration 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 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.”)

Granum Colony’s CFO is located in the MD of Willow Creek and is therefore subject to that district’s MDP. The MD of Willow Creek adopted the latest revision to this plan on August 2019, under Bylaw #1841.

Section 2 – Agriculture of the MDP points out that agriculture is a predominant land use in the MD while it is important to balance other interests. It continues to state that one of the main objectives of the MDP is to mitigate the siting of a CFOs to minimize conflicts with adjacent land uses. Policy 2.3 then continues to state that the MD shall establish guidelines with regards to the NRCB for the regulation and approval of CFOs within the MD. These guidelines are found in section 9.

Section 9.2 of the MDP directs the NRCB to consider six provisions. These are quoted below (in italics); each one is followed by my discussion of how the provision related to this application. The requested considerations are:

(a) The cumulative effect of a new approval on any area near other existing CFO’s/ILO’s

This policy is likely not a “land use provision,” as it calls for project-specific, discretionary judgements about the types of cumulative effects that should be considered and the acceptable maximum levels of each of those effects. For this reason, I do not consider the MDP provision to be relevant to my MDP consistency determination.

(b) Environmentally significant areas contained in the Municipal District of Willow Creek: Environmentally Significant Areas in the Oldman River Region report

Granum Colony’s proposed CFO is close to but not within any natural areas designated as of regional, provincial or national significance in the referenced report (Map 1 of the report). However, areas of local significance are not presented in this report.

The report also assessed the planning area for major physical constraints such as flood plains, unstable slope potential, and areas of artesian flow. The map shows that the CFO site meets one of several categories for hazard: flood plain (see further discussion in e) below).

Because the subject area is not identified as of environmental significance at a higher level, I determined that the application is consistent with this provision.

(c) Providing notice to adjacent landowners including applications for registration or authorization

This is likely not a “land use provision” because of its procedural focus and thus I do not consider it to be relevant to my MDP consistency determination. At any rate, as explained above, the NRCB sent out courtesy letters to people identified by the MD of Willow Creek as owning or residing on land within the affected party radius of 0.5 miles, and gave public notice in the Claresholm Local Press. The application therefore met the notification requirements of AOPA. (See also Operational Policy 2016-8: *Approvals*, part 6).

(d) Applying minimum distance separation calculations to all country residential development

I interpret “minimum distance separation” as referring to the minimum distance separation (MDS) requirements in section 3 and Schedule 1 of the Standards and Administration Regulation under AOPA. There is no country residential development located within the MDS for Granum Colony’s CFO and the application meets AOPA’s MDS requirements.

(e) Restricting development in the flood plain, floodway, the flood way fringe and flood prone, or hazard lands within or adjacent to any watercourse within the MD; and

As discussed in Technical Document LA20014, Granum Colony’s new CFO meets the AOPA setbacks to common bodies of water but is located in a known flood plain according to the ‘MD of Willow Creek Environmentally Significant Areas, February 1989’-report, Map 2. Because the map in this report is rather course, I contacted AEP to verify this information. The information I received indicates that the quarter section in which the proposed development is to be located may be affected by flood waters from Meadow Creek. A visual assessment during a site visit supports the claim of the applicant that the CFO is outside the flood prone zone due to the elevation difference between normal water level and the creek bank. With the information available, I determined that the application is consistent with this aspect of the provision.

(f) Restricting development in any wetland or riparian area

The proposed CFO facility is not located in a wetland or riparian area. This provision is therefore met by the application.

For these reasons, I conclude that the application is consistent with the land use provisions of the MD of Willow Creek’s MDP.

In my view, the Land Use Bylaw is clearly incorporated in the MDP in several sections throughout the MDP including section 15.5 which states:

The Development Authority shall require the NRCB to take into consideration the policies adopted in this plan and the Land Use Bylaw, when issuing an approval.

Therefore I also considered the application’s consistency with this document. Under the MD of Willow Creek’s Land Use Bylaw (#1826 consolidated to Bylaw No. 1849), the subject land is currently zoned as Rural General. CFOs are not listed as prohibited, permitted, or discretionary land use under this zoning. Ordinarily, a land use bylaw intends to preclude land uses that are not listed as permitted or discretionary (and that do not meet any other relevant criteria). However, the land use bylaw lists “intensive livestock operations” (ILOs), defined essentially as CFOs below AOPA’s permit thresholds, as a discretionary use within areas zoned Rural

General. Therefore, I interpret the omission of CFOs from the lists of permitted and discretionary land uses as simply the municipality's recognition that, since AOPA came into effect in 2002, the NRCB is responsible for permitting CFOs above AOPA thresholds.

As for the lot size restriction, section 2(4) of the Rural General part of the bylaw states that the "parcel size shall remain the same size for which the development approval was originally issued." Since CFOs are not listed in the LUB, it is my interpretation that the lot restrictions are intended to apply to ILOs that are permitted by the municipality, and are not intended to apply to CFOs above AOPA's permit thresholds. Apart from that, this application is for a new CFO.

Section 3 of the Rural General part of the bylaw lists several setbacks. The proposed chicken layer barn would meet the 75 ft. road setback required under that section. For these reasons, I conclude that the application is consistent with the land use bylaw.

APPENDIX B: Determining directly affected party status

The following individuals own or reside on land within the “affected party radius,” as specified in section 5(c) of the Agricultural Operation, Part 2 Matters Regulation:

Don Chatterton
NW 4-12-27 W4, N½ 25-11-28 W4, SE 36-11-28 W4

Randon Chatterton
NW 4-12-27 W4, N½ 25-11-28 W4, SE 36-11-28 W4

Dean and Nicole Dunand
NW 24-11-28 W4

Ken and Debra Loeffler
SW 19-11-27 W4

Allan Minor
NW 30-11-27 W4

Judy Minor
NW 30-11-27 W4

Byron Wetswell
NE 24-11-28 W4

Therefore, under NRCB policy, these individuals are presumed to be “directly affected” by the application. See NRCB Operational Policy 2016:7 – *Approvals*, part 6.2.

The following individuals who submitted responses to the public notice reside on or own land outside of the affected party radius. However, they may still qualify as directly affected parties based on their “exposure to potential nuisances or risks” posed by the proposed CFO (*Ijtsma*, RFR 2011-05, page 3):

Eleanor, Shelby and Guy Biddlecombe
NE 36-11-29 W4

Dr. Vonda Chatterton
NW 4-12-27 W4

Murray Frame and Wendy Harvey (Frame Aviation and High River Aviation)
NW 16-12-27 W4

Logan Jensen
SE 27-11-28 W4

Eddie and Natalie Jensen
NE 17-11-28 W4

Rodney and Hope Jensen
NW 18-11-28

Marlon Thompson (Edgehill Farms Ltd)
NE 12-11-18 W4 and NW 18-11-27 W4

Residents of the Town of Claresholm:

Janet and Peter Brown
Ruth Ann Chandler
Eric and Alayna Chatterton
Doug and Stella Chilton
Charlene Eskeland
Albert Fairclough
Gordon and Kay Hewitt
Barbara Hinkle
Judy Jowett
Peter Jowett
Karen Needham
James and Katherine Sandy

Under NRCB policy, a person who is not presumed directly affected has the burden of demonstrating that they are directly affected by an application. A person demonstrating the following likely meets their burden of proof:

- A plausible chain of causality exists between the proposed project and the effect asserted;
- The effect would probably occur;
- The effect could reasonably be expected to impact the party;
- The effect would not be trivial; and
- The effect falls within the NRCB regulatory mandate under AOPA. (NRCB Operational Policy 2016:7 – *Approvals*, part 6.3; see also Ijtsma, page 4.)

Using these factors I concluded that none of the persons who submitted timely concerns and who are not presumed to be directly affected are not directly affected parties. My reasons for this finding follow.

Asserted effects	Respondents
Nuisance impacts (odour and dust)	R. Chandler, D. and S. Chilton, B. Hinkle, L. Jensen, E. and S. and G. Biddlecombe, V. Chatterton, E. and A. Chatterton, R. and H. Jensen, E. and N. Jensen, A. Fairclough, C. Eskeland, J. Jowett, J. and P. Brown, G. and K. Hewitt, J. and K. Sandy, M. Frame and W. Harvey. M. Thompson
Cumulative effect with other CFOs	E. and S. and G. Biddlecombe, C. Eskeland, A. Fairclough, J. Jowett, M. Frame and W. Harvey, M. Thompson
Negative impact on the community (chose to live in remote areas, loss of current residents in Claresholm, economic consequences)	R. Chandler, D. and S. Chilton, L. Jensen, V. Chatterton, P. Jowett, C. Eskeland, M. Frame and W. Harvey
Negative health impacts	V. Chatterton, K. Needham, J. Jowett
Water supply limited already	L. Jensen, E. and S. and G. Biddlecombe, M. Thompson
Surface water and groundwater contamination (runoff from CFO and manure spreading)	<u>General</u> R. Chandler, B Hinkle, E. and A. Chatterton <u>Surface water contamination:</u> L. Jensen, E. and S. and G. Biddlecombe, R. and H. Jensen, E. and N. Jensen, V. Chatterton, M. Frame and W. Harvey, M. Thompson
Increase in traffic and deterioration of road system (including bridges), road safety	L. Jensen, E. and S. and G. Biddlecombe, R. and H. Jensen, E. and N. Jensen, M. Frame and W. Harvey, M. Thompson
Increase in taxes to repair municipal roads	L. Jensen, E. and S. and G. Biddlecombe, R. and H. Jensen, E. and N. Jensen, M. Frame and W. Harvey
Decrease in property value	D. and S. Chilton, L. Jensen, E. and S. and G. Biddlecombe, E. and A. Chatterton, C. Eskeland, G. and K. Hewitt, J. and K. Sandy
Loss of enjoyment of property and quality of life	D. and S. Chilton, L. Jensen, C. Eskeland, J. and K. Sandy
Negative impact on wildlife	B. Hinkle, E. and S. and G. Biddlecombe, E. and A. Chatterton

1) Nuisance impacts (odour and dust) in town

As shown in the table above, one of the main concerns were odour impacts as a result of the prevailing winds coming from the southwest, carrying odour from the proposed CFO 9 km southwest of town towards the town.

Nuisance impacts depend on many factors, starting with operational practices at the CFO, wind direction and speed but also perception and odour sensitivity. The MDS is a means of mitigating odour and other nuisance impacts from CFOs. The NRCB generally considers the MDS as the distance beyond which the odours and other nuisance effects of a CFO are considered to be acceptable under AOPA.

The required minimum distance separation (MDS) from the CFO to the nearest residence is 296 m for land zoned agriculture (Category 1) and 789 m for large scale country residential, hamlets, villages, towns or cities (Category 4). The proposed chicken layer barn meets the MDS to all residences. The closest residence that is not within the notification radius of 0.5 miles is over 900 m away.

Most of the other parties reside on or own land that is approximately 4 to 9 km from the CFO site.

That said, people residing beyond the MDS may still experience odours and other nuisance impacts from time to time and, in some instances, those impacts may be more than trivial. However, in this case, the closest of these respondents is located more than two times the MDS for land of category 1 and the residents within town more than two times the MDS for land of category 4 from the proposed CFO. I am therefore of the opinion that point 4 of the test has not been met.

Additionally some of the parties may experience some odours or other nuisance impacts when manure spreading takes place. However, the frequency of these exposures will likely be limited and of short duration.

2) Cumulative effect with other CFOs

I understand the concern is that the proposed development will exacerbate the current nuisance impacts experienced by the residents in the Town of Claresholm and area from existing CFOs, particularly the feedlot to the south. There are currently two existing CFO-feedlots in the area, one 3 km south of town along HWY 2 and one 4.5 km southwest of town. It is difficult to assess the degree of cumulative effect that an additional CFO of this type and size in this area would have. Perhaps due to the difficulty in this assessment, the submissions were only speculative on how much more pronounced the nuisance impacts would be from how they are right now. There is no objective threshold to determine the level of acceptable nuisance impacts arising from multiple (but separate) CFOs that adhere to generally accepted management practices (section 2(1)(c) Part 1 AOPA). Although I don't want to under-evaluate this concern, it is impossible to predict the degree to which the additional effect from this CFO would impact these individuals or whether the effect from this CFO would be more than trivial.

3) Negative impact on the community (loss of current residents in Claresholm, economic consequences for everyone)

This concern, although perhaps plausible and not trivial in nature, is difficult to evaluate, particularly in respect to actual outcome and in which way it meets point 2 (would the effect probably occur?) and 3 (would the effect be reasonably expected to impact the party?) of the analysis. There is the potential of a general impact although it is difficult to say how severe and how often nuisance issues will arise. However, albeit upwind, the proposed CFO is more than 9 km away from the Town of Claresholm. Because of this more general potential impact together with the distance between CFO and the town, I determined that the respondents have not demonstrated that the effect would reasonable be expected to impact each or any of these parties.

4) Possible negative health impacts

For the most part, the negative health impacts were characterized in general terms. I have no information, e.g. from a health professional, that this kind of CFO would cause the health impacts asserted, or would probably affect these individuals in particular.

From AHS' response, I am unable to conclude that a plausible chain of causality would exist between the proposed CFO and the asserted effects on the individuals.

5) Water supply issues

Water supply is a serious concern, particularly in Southern Alberta where surface water allocations are closed and some areas are without prolific aquifers that can provide sufficient water for farms or urban centers. Some respondents pointed out that the water table in their area has already sunk due to increase in agricultural activity or that their search for groundwater was unsuccessful which increased their concern about water security in the future. I can see a plausible chain of causality, and I can see the effect – if it occurred – could reasonably be expected to impact at least some of these individuals. However, this concern is not only outside the regulatory mandate of the NRCB, but is squarely regulated by another agency. When issuing water licences, AEP has its own approval process and procedures under the Water Act to determine the sustainability of a water source. For this reason, I will not consider this concern as a basis to grant directly affected party status.

6) Surface water and groundwater contamination (runoff from CFO and manure spreading)

Many of the respondents voiced general concerns about manure contaminated runoff from entering Meadow Creek and the potential of seepage of manure constituents into groundwater. I can see the causality, and these issues are not trivial in nature. In fact, many of AOPA's technical requirements are designed to address these concerns and the proposed development meets all of these requirements. However, aside from the environment itself, these particular respondents have not demonstrated in which way they are reasonably expected to be impacted if a contamination was to occur.

7) Increase in traffic, ability of existing road system to support the development (deterioration of roads and bridges), road safety

Another concern that was raised was an expected increase in traffic on county roads with the consequence of more noise and dust, a quicker deterioration of county roads and an increased risk of traffic accidents on county roads. Of the respondents who live in or close to town, I determined that they did not demonstrate a concrete, direct negative effect, in other words, point 3, that the effect could reasonably be expected to impact them.

Although some of the respondents who do not reside on or own land within the affected party radius, would presumably be using the road system close to the CFO on a regular basis and the effect would reasonably be expected to impact them for the purposes of the test described above, the operation of a chicken layer barn would not significantly increase the amount of traffic. Typically, chicken layer barns are stocked once a year and are run approximately one year with the same flock. The only traffic during this time are feed trucks, egg pick up, potentially manure trucks, and personnel.

For this reason, I am on the opinion that point 4 (and also point 5 for the purpose) has not been met.

8) Increase in taxes to repair municipal roads

As the MD pointed out in its response to this application, the upkeep of the road system will be costly. Consequential community costs (e.g. property taxes or other taxes) of a specific development are part of the county/MD finances and budgeting. The significance of any increased tax on any given individual, caused directly by this CFO's use of roads and bridges, is not possible for me to assess and if points 1-4 of the test can be met. In my view, the magnitude, probability and severity of this asserted effect is not only unknown, but is also outside the scope of my considerations and with that, it does at a minimum not meet the 5th point of the test. I will therefore not include this concern as a determinative factor to determine directly affected party status.

9) Decrease in property value and loss in enjoyment of property and quality of life

Although the nature of the concern has the potential to meet some parts of the test, the NRCB board members have consistently stated that concerns regarding the effect of a CFO on land values is not a subject for review under AOPA.

It would make little sense to grant directly affected status on the basis of a concern that would not be reviewed. Therefore it is not appropriate to use this concern as the basis to grant directly affected party status. However, I have considered this concern in my 'effects on the community' analysis in Appendix C below.

10) Negative impact on wildlife

Several respondents were concerned about the impact the proposed development will have on wildlife observed in this area. The speculative and general nature of this concern is not sufficient to establish points 2-5. I therefore determined that these respondents did not meet the criteria in order to gain directly affected party status.

APPENDIX C: Concerns raised by directly affected parties

The directly affected parties raised the following concerns:

1. Negative impact on health

Ken and Debra Loeffler

- *Ammonia smell makes it hard to breath*

Allan Minor

- *Odour will negatively impact physical and mental health*
- *Will cause respiratory problem for humans and livestock*

Byron Westwell

- *Dust, bacteria and other toxic compounds are released from chicken barns*
- *Can have severe impact on physical and mental health*

Judy Minor

- *Dust increases calf mortality. No compensation*
- *Impact on human health*

Approval officer comments and conclusions:

The application was sent to AHS for their comments. Due to the current health crisis, I initially did not receive a comment. However, because the health concerns that were raised by several of the respondents, I contacted the responsible representative to discuss these concerns. In response, AHS sent a letter that stated, that all efforts should be made to protect drinking water sources during construction and operation of the facility and that water testing of drinking water should be conducted. She did not comment on any specific health concerns or outcomes in respect to the operation of the chicken layer barn. I therefore presume that AHS has no specific concerns in respect to this proposal.

2. Nuisance impacts (dust, odour, flies) and enjoyment of property

Ken and Debra Loeffler

- *Unbearable smell will take enjoyment of property away*

Allan Minor

- *Residence downwind, exposed to odour and dust.*
- *Enjoyment of property*
- *Fly infestations*

Don Chatterton

- *Odour will overpower smell of the land*
- *With prevailing winds will cause odour issues for the town and surrounding residences 2/3 of the year*
- *Fly infestations*
- *Great impact on enjoyment of life*
- *Succession planning curtailed*

Judy Minor

- *Lives ¼ mile downwind with prevailing wind from that direction*
- *Nuisance impacts will greatly affect living conditions, enjoyment and quality of live will be gone*
- *Impact on heard health through dust – livelihood jeopardized*
- *Flies create a huge mess. Who is cleaning this up*

- *Persistence odour will effect physical and mental health*

Byron Westwell

- *Exposure to odour 6 month of the year*
- *Too much dust*
- *Unsightly*

Approval officer comments and conclusions:

AOPA's minimum distance separation (MDS) requirements are a proxy for minimizing odours, flies, and other nuisance effects from CFOs. The proposed CFO does meet the MDS to all neighbouring residences. Typically, it is presumed that nuisance effects from the CFO facilities are within an acceptable range of effects if the MDS has been met.

Consulting weather data from several websites including weatherspark and meteoblue, it seems that the predominant wind direction in the area of Claresholm is from the west, west-southwest and southwest direction for most of the year. The wind rose also showed that the winds blow from all directions for some portion of the year, but blow for the shortest time from the N-NE to SE quadrant. Because of the prevailing winds from the south-southwest it cannot be excluded that the Minor residence in particular, but also other residences downwind, will be exposed to some odour and other nuisance impacts. However, these impacts, as mentioned above, are considered within the acceptable range of effects on lands zoned for agriculture.

It is true that there will be odours resulting from the land application of manure. These odours are normally of short duration and typically occur once or twice per year. In order to limit the nuisance impact of manure application on direct seeded or tame forage land, Section 24 of the Standards Regulation precludes manure spreading without incorporation within 150 m of residences. Manure that is spread on conventionally tilled land must be incorporated within 48 hours. Setbacks and incorporation can help to minimize normal odours from manure spreading. Incidences of non-compliance can be reported to the NRCB's 24 hour a day reporting line (1-866-383-6722 or 310-0000 toll free line).

Several of the respondents were concerned about the level of dust resulting from constant traffic past their property. From past experiences, the owners anticipate a severe impact on the health of their calves that are raised on the pastures along the access road to the CFO. To minimize dust development, the operator has the option to enter into an agreement with the county to treat the specific sections of the road. To my knowledge, Granum Colony has not entered into any agreements with adjacent neighbours to address this concern and mitigate the development of dust due to the increased traffic. However, this could be an option in order to address this concern.

Fly infestations were also a concern voiced by several respondents. As per section 20(1) Standards and Administration Regulation, an owner or operator of a CFO must employ reasonable measures to control the level of infestation of flies at a location occupied by the operation. Incidences of unreasonable fly infestations can be reported to the NRCB's 24 hour a day reporting line (1-866-383-6722 or 310-0000 toll free line).

Surface water contamination through runoff and groundwater contamination

Don Chatterton

- *Runoff likely to occur due to slope of the land*
- *Runoff during manure loading*
- *Well of neighbour might get contaminated. Happened before*

Ken and Debra Loeffler

- *Manure could enter groundwater resources*

Allan Minor

- *Greatly concerned about runoff and contamination of Meadow Creek that provides drinking water*
- *Manure runoff in Meadow Creek can cause contamination of water wells during flooding*

Judy Minor

- *Chicken barn proposed on hill. Will cause runoff and contamination of water and land*
- *Great possibility of runoff reaching all surrounding water sources (creek, lakes, dug outs)*

Byron Westwell

- *Slope of the land promotes runoff into nearby creek. Contamination will spread throughout the creek system*
- *Contamination of domestic well likely. Happened before*

Dean and Nicole Dunand

- *Groundwater contamination*

Approval officer comments and conclusions:

Surface water contamination:

The barn is under roof with an attached manure storage area. A risk of manure spills during loading or during operation is expected to be minimal. Therefore, the risk to surface water is presumed to be low.

Groundwater contamination:

The proposed chicken layer barn with attached manure storage area will have a concrete floor that will meet the concrete specifications required under the regulations. The risk to groundwater is therefore considered to be low.

Groundwater contamination of wells through manure contaminated flood waters from Meadow Creek could be possible under extreme circumstances. However, the proposed barn with attached manure storage area meets or exceeds the groundwater and surface water requirements in the regulations and is therefore considered to be acceptable.

Water quantity

Ken and Debra Loeffler

- *CFO can overuse groundwater resources*

Allan Minor

- *Only few and very poor water wells in area. Increased demand will affect everyone's livelihood*

Judy Minor

- *Creeks run low, particularly in dry years. If water was used for chicken, this would jeopardize everyone else's livelihood*

Don Chatterton

- *Water supply already a problem with wells running dry*

Byron Westwell

- *Water well already has limited production. Aquifer cannot support more users*

Dean and Nicole Dunand

- *Very limited groundwater available. Further strain on aquifers in area*

Approval officer comments and conclusions:

Alberta Environment and Parks (AEP) is responsible for licencing the use of surface water and groundwater in the province. Operations or residences that do not hold an AEP water license have to obtain a water license from AEP. Therefore, for efficiency and to avoid inconsistent regulation, NRCB approval officers generally do not consider water supply concerns when reviewing AOPA permit applications, other than ensuring that applicants sign one of the water licensing declarations listed in the Part 2 application form. (This declaration is on page 6 of Technical Document LA20014. See also NRCB Operational Policy 2016-7: *Approvals*, part 8.10.) Granum Colony's application includes a signed declaration indicating that Granum Colony does not need a water licence.

The email response from AEP confirmed that a water license is required and stated that they have not yet receive an application for a water licence. The applicant is reminded that it is their responsibility to ensure that they obtain necessary water licensing for the proposed CFO.

Traffic

Don Chatterton

- *All bridges in area can be flood several days and are unusable for a long time*
- *Roads to not constructed to support heavy traffic*

Allan Minor

- *Infrastructure, roads and bridges, is not setup for that traffic (volume and weight)*
- *Increase in traffic will create a lot of dust*

Judy Minor

- *Roads and bridges can't handle the volume and weight of traffic*
- *Manure will end up on roads*

Byron Westwell

- *Roads are already deteriorating quickly with current traffic. Not suitable for an increase in heavy duty traffic*

Approval officer comments and conclusions:

The concerns raised by the directly affected parties are similar to those raised by the MD of Willow Creek. The operation of a chicken layer barn requires limited truck traffic which include delivery of pullets, pick up of eggs, feed trucks, personnel, and manure hauling.

The NRCB does not have direct responsibility for regulating road use. Section 18 of the *Municipal Government Act* gives counties "direction, control and management" of all roads within their borders. Because of this it would be impractical and inefficient for the NRCB to attempt to manage road use through AOPA permits. (See Operational Policy 2016-7: *Approvals*, part 8.9.).

Impact on local wildlife

Raydon Chatterton

- *Area provides habitat for northern leopard frog (endangered species)*

Approval officer comments and conclusions:

AOPA and its regulations do not address requirements relating to other land uses, including natural habitat for wildlife. Looking at available information from AEP, it appears that the quarter section in question is not identified as habitat for any endangered species, however it is classified as a key wildlife and biodiversity zone.

The construction of the barn will likely entail the establishment of a larger graveled area around the barn, nevertheless, it seems that much of the vegetated area to the west, across the creek, as well as towards the north will remain undisturbed. This would preserve much of the habitat that is currently available. Having said that, the operator is reminded that the northern leopard frog is an endangered species and that every effort should be made to preserve its habitat.

Impact on air traffic

Allan Minor

- *Has air strip in area. Required elevation above barn will not allow air traffic in area*

Raydon Chatterton

- *Barn requires 2,000 ft. distance for fly-overs. Not a good height to scout for cattle*

Don Chatterton

- *Barn will not allow fly-over that is necessary during flood events to check on cattle*

Response from the applicant (the agent responded on Granum Colony's behalf)

The newest information from the Alberta Aviation Council shows that the land strip of Allan Minor is no longer in existence.

Approval officer comments and conclusions:

Although the concern of a potential restriction to scouting local cattle herds in this area is understandable, it has never come to my attention that there are airspace restrictions in respect to chicken barns. Looking at several websites, I have not been able to find conclusive information that the claimed 2000 feet airspace above the barns is off limits for local, small aircrafts, however, it should be noted that all aircraft are required to abide by the requirements set out in the Canadian Aviation Regulations.

Siting of the chicken barn in flood plain

Don Chatterton

- *Regular severe flooding of the creek (1954, 1963, 1966, 1978, 1995, 2005, 2013, 2014)*
- *Flooding will not allow access to chicken barn*
- *A dam, built by PFRA on Meadow Creek was washed out.*

Ken and Debra Loeffler

- *Regular floods*

Allan Minor

- *Located in flood plain*

Judy Minor

- *Located in flood plain*

Approval officer comments and conclusions:

As mentioned above, the Environmental Significant Areas report depicts the area as part of a flood plain. To verify this assessment, I inquired with AEP if the CFO is located within a flood plain. In AEP's response, the representative explained that there is potential for flooding in this area due to the bridge which can obstruct flow through ice pile ups during snow melt.

Although the respondents indicated that the surrounding lands have been frequently flooded, the location of the proposed chicken barn is on higher ground. I confirmed during my site visit, that there is a substantial elevation difference between the creek and the proposed barn. Based on the overall landscape and the observed elevation difference between the creek and the creek bank at this location, I am on the opinion that section 8 of the Standards and Administration Regulation has been met and the risk of this area to be flooded is minimal.

Dead animal disposal

Don Chatterton

- *Do carcasses end up on the land*

Approval officer comments and conclusions:

Dead animal disposal is regulated directly by AF's' Regulatory Services Branch, under the *Animal Health Act* (see Operational Policy 2016-7: Approvals). Given AF's regulatory role, concurrent oversight of dead animal disposal by the NRCB would be inefficient and might lead to inconsistency with AF's requirements.

However, any incidences of non-compliance or any concerns in relation to a CFO operation can be reported to the NRCB's 24 hour a day reporting line (1-866-383-6722 or 310-0000 toll free line).

Manure spreading lands

Don Chatterton

- *Manure spreading land too small and not suitable (in floodplain)*

Radon Chatterton

- *Manure spreading land right beside Willow Creek and part of flood plain*

Judy Minor

- *Manure will contaminate Willow Creek*

Approval officer comments and conclusions:

The Manure Characteristics and Land Base Code, referenced in AOPA lays out the required land base for manure spreading for all livestock types. The calculation considers several factors, including the amount and nutrient content of the type of manure, as well as the soil zone in which manure is proposed to be applied.

The listed quarter section is close to Willow Creek. Google Earth pictures taken in 2015 show that there is a larger area in the listed quarter section that was likely flooded. Manure spreading typically occurs either in spring or fall. The spring application could coincide with possible flood events early in the year up to June. To prevent manure contaminated runoff from entering Willow Creek, which provides water for human consumption and is also a fish bearing creek, I will add a condition stating that manure has to be applied in the fall and that manure must be incorporated.

Impact on property value and increase in property taxes

Don Chatterton

- *Will negatively affect property value*

Ken and Debra Loeffler

- *Property value will go down. Nobody wants to live next to a chicken barn*

Allan Minor

- *Decrease in property value. Nobody wants to live next to a chicken barn*

Judy Minor

- *Property value will go down*

Byron Westwell

- *Decrease in property value. Loss of live investment*
- *Taxes will go up*

Approval officer comments and conclusions:

In previous board decisions the NRCB's board members have "consistently stated" that concerns regarding effects on land or property values are "not a subject for [the board's] review under AOPA or for approval officers' consideration." According to the board, impacts on property values are a land use issue, which is a "planning matter dealt with by municipalities in municipal development plans and land use bylaws." (See, Pigs R Us Inc., RFR2017-11/BA17002 at 6).

General concerns

Don Chatterton

- *Incidences of water damage to hay crops, damage to others property*

Ken and Debra Loeffler

- *Has other lands available*

Allan Minor

- *Large corporation operates on expanse of small land owners*
- *Other options available*

Judy Minor

- *Other options are available*
- *No communication or consideration of other people livelihoods*

Approval officer comments and conclusions:

- a) Unneighbourly behaviour

If a person or party has concerns regarding manure collection or storage facilities, spreading or other CFO related issues, those concerns can be reported to the NRCB's 24 hour reporting line (1-866-383-6722). The call will be followed up on by an NRCB inspector. Neighbours and

concerned parties can also call any NRCB office during regular business hours if they have questions about permit conditions or ongoing AOPA operational requirements.

Other operational issues such as damage to property not owned by the operator would probably best resolved between the parties involved or reported to respective agencies.

b) Other options

AOPA does not require an applicant to justify a selected site for a proposed development relative to other possible sites, but rather only that the proposed site is able to meet the various requirements of the legislation. I therefore did not consider other possibilities and looked only at the proposal before me.

APPENDIX C: Explanation of conditions in Registration LA20014

a. Construction Deadline

Granum Colony proposes to complete construction of the proposed new chicken layer barn with manure storage within one year of receiving the permit. This time-frame is considered to be short for the proposed scope of work. The deadline of December 31, 2023 is included as a condition in Registration LA20014.

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, Registration LA20014 includes conditions requiring:

- the concrete used to construct the liner of the manure collection and storage portion of the new chicken layer with manure storage area 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.”
- Granum Colony to provide written confirmation, signed by a qualified third party, that the concrete used for the manure collection and storage area meets the required specifications.

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. Registration LA20014 includes a condition stating that Granum Colony shall not place livestock or manure in the manure storage portions of the new chicken layer barn with manure storage area until NRCB personnel have inspected the new chicken layer with manure storage area and confirmed in writing that it meets the registration requirements.

c. Manure spreading

Because the quarter section that is listed as available land base for manure spreading (SE 32-11-27) is located in close proximity to Willow Creek, I will include a condition that requires Granum Colony to spread manure in the fall and all manure has to be incorporated. The applicant is reminded that manure has to be incorporated within 48 h of spreading and that manure application on frozen and snow covered ground is prohibited.