

# **BOARD DECISION**

# RFR 2018-05 / LA16046

In Consideration of Requests for Board Review filed under the *Agricultural Operation Practices Act* in relation to Decision Summary LA16046

Hutterian Brethren of Summerland

March 21, 2018

# Background

On January 23, 2018, NRCB Approval Officer Andy Cumming issued Decision Summary LA16046 in relation to the confined feeding operation (CFO) proposed by Hutterian Brethren of Summerland (Summerland Colony) at N½ 12-13-24 W4M in Vulcan County (County). Summerland Colony sought approval for a new:

- 550 swine farrow to finish
- 140 dairy milking cows (plus dries and replacements)
- 30,000 chicken layers (plus associated pullets)
- 1,300 ducks
- 200 geese
- 102,000 chicken broilers

The proposed CFO includes the construction of:

- Chicken pullet barn (45.1 m x 16.7 m)
- Chicken pullet barn manure storage (16.7 m x 10.4 m x 2.1 m deep)
- Chicken layer barn (80.8 m x 25.2 m)
- Chicken layer barn manure storage (10.4 m x 25.2 m x 2.1 m deep)
- Two chicken broiler barns (each 143.3 m x 24.4 m with a 6.1 m x 24.4 m service room)
- Mixed poultry barn (ducks, geese and broilers) (41.5 m x 12.2 m)
- Hog quarantine barn (including office) (12.2 m x 18.3 m)
- Hog barn (50.4 m x 175.2 m x 0.6 m deep)
- Dairy barn (123.7 m x 39.0 m)
- Dairy barn pit (3.0 m x 15.2 m x 1.8 m deep)
- Calf shelter (143.3 m x 18.3 m)
- Dairy replacement pens (143.3 m x 18.3 m)
- Above ground concrete liquid manure storage tank (81.3 m diam. x 4.9 m deep)
- Two runoff control pits (4.5 m x 12.0 m x 0.8 m deep)

The approval officer considered this application in Decision Summary LA16046 and issued an approval with conditions.

Pursuant to section 20(5) of the *Agricultural Operation Practices Act* (AOPA), Requests for Board Review (RFRs) of Decision Summary LA16046 were filed by directly affected parties Courtney Thomas, Todd McFarland, the Smith Family (Bruce and Maureen Smith, and Michael and Lindsey Smith), and Wendy and Dennis Johnson.

It should be noted that although members of the Smith Family were not identified as directly affected in Decision Summary LA16046, counsel for the approval officer sent a letter on February 21, 2018 advising the Board that the approval officer should have found the members of the Smith Family were directly affected parties. The Board has reviewed that letter as well as the location of the Smith lands and accepts that the Smith Family were directly affected parties. The Smith Family were directly affected parties that the Smith Family were directly affected parties. The Smith Family submitted statements of concern to the approval officer on April 20, 2017, a request to the Board to find them directly affected, and a request for review of the approval officer's decision.

Pursuant to section 20(6) of AOPA, Barry McFarland and the Village of Carmangay (the Village) each requested that the Board first find them to be directly affected by the Summerland Colony application,

and then consider their RFRs of Decision Summary LA16046. Both Barry McFarland and the Village had filed statements of concern with the approval officer.

Following receipt of the RFRs, all parties were provided with copies of the requests on February 14, 2018, and notified of the Board's intent to meet and deliberate on this matter. Directly affected parties with an adverse interest to the matters raised in the RFRs were provided the opportunity to make a rebuttal submission in response. The Board received submissions dated February 14, 21, and 22, 2018 from the Summerland Colony.

## Jurisdiction

The Board's authority for granting a review of an approval officer's decision is found in section 25(1) of AOPA, which states:

- 25(1) The Board must, within 10 working days of receiving an application under section 20(5), 22(4) or 23(3) and within 10 working days of the Board's determination under section 20(8) that a person or organization is a directly affected party,
  - (a) dismiss the application for review, if in the opinion of the Board, the issues raised in the application for review were adequately dealt with by the approval officer or the issues raised are of little merit, or
  - (b) schedule a review.

The Board considers that a party requesting a review has the onus of demonstrating that there are sufficient grounds to merit review of the approval officer's decision. Section 13(1) of the *Board Administrative Procedures Regulation* describes the information that must be included in each RFR.

## **Documents Considered**

The Board considered the following information:

- Decision Summary LA16046, dated January 23, 2018
- Approval LA16046
- Technical Document LA16046
- RFRs filed by:
  - Courtney Thomas
  - Todd McFarland
  - the Smith Family (Bruce and Maureen Smith, and Michael and Lindsey Smith)
  - Wendy and Dennis Johnson
- Requests to review directly affected party status and RFRs filed by:
  - Barry McFarland
  - Village of Carmangay
- Vulcan County Municipal Development Plan
- Portions of the public record maintained by the approval officer
- Rebuttal submissions from Summerland Colony dated February 14, 21, and 22, 2018

## **Board Deliberations**

The Board met on February 28, 2018 to deliberate on the RFRs.

### Preliminary Issue—Review of Directly Affected Party Status

Barry McFarland and his spouse, and the Village submitted statements of concern to the approval officer in response to the Notice of Application (published in the March 22, 2017 edition of the *Vulcan Advocate*). The approval officer determined that neither of these parties had established that they would be directly affected by the proposed CFO.

In reviewing the concerns raised, the Board finds that neither Barry McFarland and his spouse nor the Village has established that they would be directly affected parties. The Board refers to internal NRCB operational policy, 2016-17 (Approvals January 26, 2016, page 6.3), and NRCB Board Decision 2011-05/RA11001 (Klaas Ijtsma, May 19, 2011, p.4), which describe a test for directly affected as follows:

- 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,
- the effect falls within the NRCB regulatory mandate under AOPA.

This approach is similar to that outlined by the approval officer in Decision Summary LA16046.

The Board notes that the approval officer considered the proximity of the proposed CFO to the Village (5 km NE of the CFO), and Barry McFarland's lands (residence is 11.5 km NE and he owns land 5.5 km NE of the CFO). In his RFR, Barry McFarland stated that he owns land and resides 11.5 km NE of the CFO, in addition to owning property in the Village 5.5 km NE of the CFO. The minimum distance separation (MDS) prescribed by AOPA to mitigate the nuisance effects of the CFO on neighbouring residences was calculated by the approval officer as 804 m (0.8 km) to an agriculture zoned residence and 2,143 m (2.1 km) to residences in a hamlet, village, or town. The Vulcan County municipal development plan establishes an exclusion zone that extends 1.6 km from the south side of the Village. This exclusion zone prohibits new CFO development to avoid land use conflicts with the Village. The proposed CFO is approximately 6 km from the Village. The Board concurs with the approval officer's assessment that nuisance effects on Barry McFarland and the Village may occur, and finds that the frequency, magnitude, and duration of those effects are not sufficient to warrant a finding that either party should be considered to be a directly affected party.

Beyond nuisance factors, each of the parties that have asked the Board to find them to be directly affected raised a number of concerns. Barry McFarland's stated concerns about NRCB compliance history with another operator are not a basis to confirm the proposed CFO directly affects him or his spouse. Allegations about cumulative effects are not supported by evidence or by judicial comment. The Court of Appeal decision referred to by Barry McFarland does not describe that there is a cumulative effect that must be considered before the proposed CFO is permitted; rather, the Court of Appeal was dealing with review of the County's Municipal Planning Commission decision, and did not make any binding statements about the relevance of cumulative effects in the context of the proposed CFO before the NRCB. There is nothing in

Barry McFarland's RFR that creates a plausible chain of causality between the claimed environmental or health effects from the CFO and the McFarland's. Additional concerns raised by the Village to support its claim for directly affected party status included that "AHS [Alberta Health Services] used flawed data to determine wind patterns", and that the approval officer failed to consider third party research on human exposure to CFOs (Ohio study). We find that there is no evidence to establish that the wind data is flawed (see page 9 of this report).

The Ohio study was relied upon by the Village to support direct effects on its residents, related to comparisons in impacts between a majority of homes closer than 900 m to manure lagoons, versus unexposed people living at least 3 km from lagoons and others unexposed in a nearby state.

The Board finds that the study is not compelling evidence to establish directly affected status for the Village for the following reasons:

- (a) The study does not describe the type of lagoon system employed by the operation or the size of the operation in terms of manure production or animal units.
- (b) Hydrogen sulphide is identified as an environmental exposure for study participants; however, there are no point source data provided for the referenced manure lagoons.
- (c) The Ohio study concludes that there is insufficient data to propose a safe dosage of hydrogen sulphide or a dose-time relationship. It states:

Data are insufficient to propose a safe dose of hydrogen sulphide ... As a safe level cannot be proposed, it would be prudent to separate people from all sources of hydrogen sulphide: feed lots, tanneries, oil refineries and natural gas processing (desulphurization), and ponds and lagoons contain sulfur that becomes anaerobic as in geothermal sites such as hot springs.

The study made no reference to what an appropriate separation distance between hydrogen sulphide sources and people should be. It follows that no compelling evidence about a plausible chain of causality is proved by the Village.

(d) The Ohio study has no context for application to the MDS standards set by regulation under AOPA. Those standards and the regulations under AOPA are the prevailing requirements in the context of an Alberta CFO. With approximately 6 km between the CFO and the Village, this is more than double the 2.14 km AOPA MDS to an urban residence. Considering the AOPA regulations and standards, the Board finds there is no evidence before it that an effect from the proposed CFO on the Village would probably occur or could reasonably be expected to impact the Village and its residents.

To conclude, the Board finds the approval officer's decisions that neither the Village nor Barry McFarland and his spouse are directly affected parties are reasonable, given the distance between the proposed CFO and Barry McFarland's lands and the Village's boundaries, and given that neither Barry McFarland and his spouse, nor the Village has established a direct effect arising from the CFO. As such, the Board dismisses the Barry McFarland and Village requests for directly affected party status.

### Deliberations on Requests for Review (RFRs)

In its deliberations, the Board considered each RFR filed by the directly affected parties and the various issues raised. The Board must dismiss an application for review if, in its opinion, the issues raised in the RFR were adequately dealt with by the approval officer or the issues are of little merit. The issues raised in the RFRs include:

- Effects on Human Health
- Johnson and McFarland Development Permits
- Other Concerns Raised (land value, wetlands, and prevailing wind direction)

#### **Effects on Human Health**

Specific human health concerns were raised in the RFRs filed by Todd McFarland, Courtney Thomas, and the Smith Family. Each of these parties provided letters from health care professionals that identified specific health concerns in the health of Todd McFarland, Courtney Thomas, and Bruce Smith, respectively. On referral by the approval officer to AHS, the AHS response in revised correspondence dated April 25, 2017 (forwarded under email cover dated May 10, 2017), included the following:

...AHS has no objections to this application and provides the following comments for your considerations [sic]...

AHS also included comments in the May 10, 2017 email addressing the approval officer's request for AHS' response to a provided summary of health-related concerns of both directly affected parties, and parties outside of the directly affected area.

In Decision Summary LA16046, the approval officer included a direct quotation from the May 10, 2017 AHS response:

AHS noted that the concerns may be valid, however "without existing baseline data or the provision of plans to address the mitigation of these concerns [AHS is] unable to confirm that these concerns will cause issues."

The Board accepts that Todd McFarland, Courtney Thomas, and Bruce Smith have health related issues, as described below, in extracts from reporting by their respective physicians:

(a) April 11, 2017 Letter from Todd McFarland's specialist (Clinical Islet Transplant Fellow)

...Mr. Todd McFarland is chronically immunosuppressed and therefore at increased risk of infection including from, but not limited to exposures to waterborne and airborne organisms....

(b) April 21, 2017 Letter from Courtney Thomas' family doctor

...this young lady suffers with Asthma of brittle nature since an early age....It was a medical advice [sic] that she lives in a healthy and non-polluted environment. It is absolutely not advisable for her to have functioning barns and other active agricultural plants close to her residential place....

(c) April 18, 2017 Letter from Bruce Smith's physician in internal and respiratory medicine

... I follow [Mr. Bruce Smith] for chronic lung disease, which has managed to be fairly stable.

The nature of Mr. Smith's lung disease is such that inhalation of organic, particulate matter, specifically airborne micro-organisms, as well as feather, fur or dander's of animals will markedly worsen this patients underlying lung condition....I would recommend no exposure to these agents which are known to worsen/propagate the occupational lung disease....

The Board finds that none of the RFRs and the evidence accompanying them (including statements of concern contained in the approval officer's file) satisfies the primary burden of proof on the directly affected parties to establish a link between the proposed CFO and potential adverse health effects on Todd McFarland, Courtney Thomas and Bruce Smith.

The Board makes this finding for the following reasons:

- (a) None of the letters from the physicians of Todd McFarland, Courtney Thomas and Bruce Smith, describes a direct link between the conditions these individuals suffer from and the location of the proposed CFO and its effects, as analysed below:
  - i. Todd McFarland's Islet Transplant Fellow describes "increased risk of infection including from, but not limited to, exposures to waterborne and airborne organisms". The Board finds this is a non-specific and general concern that does not support a causal connection between the effects of the proposed CFO and the immunosuppression condition, nor does it acknowledge Mr. McFarland's current exposures to agricultural activity. The Board infers that "exposures to waterborne and airborne organisms" is a reality of farming life, which Todd McFarland is exposed to on a regular basis: "I am obviously on my land throughout the year, in all weather...." Additionally, as noted by his daughter in email correspondence dated April 17, 2017, "I help my dad on the farm...there is a slough right off the road that frequently floods the road". The Board finds that exposure to waterborne organisms and airborne organisms is not established by the medical evidence to be causally connected to the proposed CFO and its operations.
  - ii. Courtney Thomas' family doctor describes that she should live "in a healthy and non-polluted environment...not advisable to have functioning barns and other active agricultural plants close to her residential place...." We find that Courtney Thomas acknowledges in correspondence to the approval officer dated March 6, 2017, that she herself lives on a farm and has "to fight on good days to enjoy being on the farm". She also states that her physician says she should not be exposed to "this type of agricultural practice". The Board finds that the medical evidence of the family doctor is not compelling because he does not describe a distance separation that would be "close to her residential place", nor does he consider the conditions on Ms. Thomas' current farm or acknowledge the fact that Ms. Thomas already struggles with her medical condition on her farm "on good days".
  - iii. Bruce Smith's respiratory physician describes concern about "inhalation of organic, particulate matter" and recommends "no exposure to these agents". The Board finds that the concern about inhalation of particulate matter is a non-specific and general description and does not support a causal connection to the proposed CFO any more

than it may be connected to the Smith Family's existing farming operations or other existing agricultural activity in the area. Moreover, the Board finds that the physician does not acknowledge that Bruce Smith is actually resident on a farm (5.5 Km from the proposed CFO), has lived in the area for 75 years, and farms and works "daily on many acres between the proposed site and [his] farm". The physician's recommendation that there be "no exposure to these agents" fails to recognize the agents Mr. Smith is exposed to on a daily basis. On this basis the Board finds that the medical evidence of Mr. Smith's respiratory physician is not compelling medical evidence to support a causal connection between his condition or a worsening of it as a result of the location and approval of the proposed CFO.

- (b) The approval officer adequately considered the personal health issues of Todd McFarland, Courtney Thomas and Bruce Smith, by seeking a response from AHS. In response, AHS states in both original and revised correspondence that it "has no objections to this application".
- (c) The Board infers that exposure to environmental factors is associated with living in an area zoned for agriculture and participating in agricultural activities, which may already contribute to adverse health effects on Todd McFarland, Courtney Thomas and Bruce Smith.
- (d) The Board also reviewed studies raised by Courtney Thomas in her RFR, which she alleged supported her position that the proposed CFO would affect her health condition. The Board finds that the studies fail to establish a causal relationship between the proposed CFO and Ms. Thomas' health condition(s). As noted in the Board's discussion and analysis of the Ohio study, discussed above (see page 4 of this report), for similar reasons these studies are not compelling, particularly given the jurisdiction of AOPA and its regulations in the province of Alberta.
- (e) The Board finds that the distance between the residences of Todd McFarland, Courtney Thomas and Bruce Smith and the proposed CFO is greater than the required MDS of 804 metres (0.8 km). For example, Todd McFarland (at the time of the Part 1 application) resided in the Village, almost 6 km from the proposed CFO (as described in an email to the approval officer dated March 24, 2017, listing a Village residential address). Bruce Smith resides approximately 5.5 km from the proposed CFO. Courtney Thomas resides approximately 2.8 km from the proposed CFO. As a result, the Board finds that the MDS, as required by AOPA and its regulatory standards on nuisance factors (i.e., odour, dust, pests, noise and other nuisance impacts), provides assistance in understanding the relevant magnitude of airborne emissions from the CFO at the residences of Todd McFarland, Courtney Thomas and Bruce Smith. Not only does distance have a direct effect in reducing airborne nuisances, the relative significance of any airborne nuisance emissions from the CFO in relation to other point source emissions will be reduced. At the distances provided, the Board finds that there is likely to be only a minimal contribution from the CFO manure storage facilities to the total emissions that reach the three residences.

In reviewing the various health professional opinions provided, the Board finds that Todd McFarland, Courtney Thomas, and Bruce Smith likely do have to take measures to minimize the effects of agricultural environmental factors on their respective health conditions. However, none of the evidence before the Board presents a credible basis or rationale for isolating the potential effects from the proposed CFO from existing environmental factors. In addition, the evidence does not link effects from the proposed CFO to potential health effects to these parties. Having regard for all the submissions, the Board is not persuaded that the proposed CFO will materially elevate the exposure of environmental factors of concern to these three individuals. The Board is therefore satisfied that the approval officer adequately considered the health concerns raised in the RFRs, including through referral to AHS. To conclude, the Board finds that there is no compelling evidence establishing a link between these health concerns and the potential environmental effects of the proposed CFO.

In considering the personal health effects raised in the RFRs, the Board deliberations included considerable discussion of the NRCB's statutory mandate. Specifically, the Board is uncertain whether AOPA section 20(1)(b)(ix) and its direction to "consider the effects on the environment, the economy and the community and the appropriate use of land" directs it to consider health effects on specific individuals that have an elevated health risk, or whether this direction is intended to have the NRCB consider the general siting of the CFO in relation to the broader effects on the community. Given that the Board has this uncertainty, it proceeded to review these RFRs by first considering whether the RFRs raised a specific health concern that directly linked health effects to the CFO. If the Board had identified a direct health effect link, it would have proceeded to consider the role of such health effects in the NRCB mandate under section 20(1)(b)(ix) of AOPA. As the Board has concluded that none of the RFRs directly linked health effects to the proposed CFO, it has not made a determination on how the AOPA mandate responds to a potential health effect on a specific individual.

#### Johnson and McFarland Development Permits

Both the Todd McFarland and Johnson RFRs include statements that their respective development permits issued by the County for residences within the MDS required for the proposed CFO should cause the Board to conduct a review.

The NRCB has adopted a two-part AOPA application process. At the filing of a Part 1 application, the MDS for a given approval application is established. The Part 1 form requires the applicant's name and contact information, a summary and location of the proposed development, and other nontechnical information. The Part 2 form requires more comprehensive and technical information, including site and design plans and the information needed by the approval officer to assess whether AOPA's specific technical requirements have been met.

Both AOPA and the *Board Administrative Procedures Regulation* (Procedures Regulation), give approval officers discretion to require applicants to provide more information than that required in the Part 1 and 2 forms. The purpose of having a two-part application process is related to section 3(2) of the *Standards and Administration Regulation* (Standards Regulation), which states that the MDS "must be calculated ... as of the date the application is received" by the approval officer. In other words, applicants must meet the MDS to those neighbouring residences that exist or have a development permit as of that application filing date.

In this case, the Part 1 application was filed on October 4, 2016. It follows that the development permits for residential use raised by the Todd McFarland and Johnson RFRs, since they were all subsequently obtained, did not impact the MDS setbacks and the proposed CFO siting. (The Board notes that the Todd McFarland residential permit was effective October 26, 2016 and the Johnson residential permit was effective April 28, 2017.)

Using a two-part application allows the date for applying the MDS requirements in section 3 of the Standards Regulation to be set on the date the applicant submits their Part 1 application. However, the Part 1 application form states that an approval officer may deny an application if an applicant fails to submit their Part 2 application within six months after filing their Part 1 application. The Board understands that the Alberta government made this regulatory provision to give applicants certainty with respect to whether they can meet the MDS requirement, before they commit the considerable

time and resources needed to collect technical information and finish the engineering work needed to complete their entire application.

The six month deadline in section 6(4) of the Procedures Regulation for submitting the Part 2 application ensures that an applicant cannot indefinitely establish a MDS. If an applicant cannot meet the six month deadline for filing the Part 2 application, they may submit a written request to the approval officer, with reasons, to extend the deadline for up to six more months—i.e., for a maximum of one year after the Part 1 was filed. The approval officer will consider the extension request and advise the applicant of their decision, in writing. If an extension is granted, the approval officer must provide a copy of this decision to the municipality in which the proposed development is located.

In this case, the Board finds that the Part 2 application was deemed complete and received from the Summerland Colony on March 22, 2017, which is well within 6 months of the Part 1 application date of October 4, 2016, as required by the Procedures Regulation.

To conclude, in reviewing the RFRs and Decision Summary LA160046, the Board is satisfied that the approval officer adequately considered this issue in relation to both the McFarland and Johnson development permits.

#### **Other Concerns Raised**

Other concerns raised in the RFRs include potential negative effects on land value and wetland expansion. Additionally, several of the RFRs state that the approval officer failed to consider that the prevailing wind in the area would place the Village downwind from the proposed CFO.

The Board notes that the approval officer considered each of these issues in the course of considering the CFO application. It is clear in Decision Summary LA16046 that the approval officer was interpreting the Town of Vulcan wind rose as indicating that the most frequent winds are from the southwest (upwind of the Village). The approval officer further noted that despite the Village being located east-northeast of the CFO, the Village is over twice the required MDS from the proposed CFO. The Board does not find any merit in the assertion that the approval officer interpreted the available evidence such that he misunderstood the direction of prevailing winds at the proposed CFO site.

At least one of the RFRs raises issues concerning the effect of the proposed CFO on neighbouring land values. The Board accepts that landowners are concerned about the value of their lands. However, as the Board has consistently stated in previous decisions, land value effects related to community land use is a planning matter dealt with by municipalities through land use provisions in both MDPs and land use bylaws. Effects on neighbouring land values are not a relevant Board consideration when the development is consistent with the MDP's land use provisions.

The Johnson RFR raises the issue that the CFO manure storage facilities will displace surface water and may increase the size of the wetland on the adjacent Johnson land. The Board notes that this issue was not raised in the statement of concern that the Johnson's filed with the approval officer. In any event, the Board finds that the AMEC engineering report prepared and filed as part of the Summerland Colony CFO application indicates that the vegetative filter strip will adequately address runoff from the pen and calf shelter.

Based upon the above analysis and discussion, the Board finds that these issues have no merit.

## Decision

As a result of the Board's deliberations, the Board finds that the approval officer adequately considered all issues raised in the filed Requests for Review and therefore does not direct any matters to a hearing. The RFRs are denied.

DATED at EDMONTON, ALBERTA, this 21st day of March, 2018.

Original signed by:

Peter Woloshyn

L. Page Stuart

Michele Annich

Contact the Natural Resources Conservation Board at the following offices. Dial 310.0000 to be connected toll free.

#### **Edmonton Office**

4th Floor, Sterling Place, 9940 - 106 Street Edmonton, AB T5K 2N2 T (780) 422.1977 F (780) 427.0607

### **Calgary Office**

19<sup>th</sup> Floor, 250 – 5 Street SW Calgary, AB T2P 0R4 T (403) 297.8269 F (403) 662.3994

#### **Fairview Office**

Provincial Building, #213, 10209 - 109 Street P.O. Box 159, Fairview, AB TOH 1L0 T (780) 835.7111 F (780) 835.3259

#### Lethbridge Office

Agriculture Centre, 100, 5401 - 1 Avenue S Lethbridge, AB T1J 4V6 T (403) 381.5166 F (403) 381.5806

#### **Morinville Office**

Provincial Building, #201, 10008 - 107 Street Morinville, AB T8R 1L3 T (780) 939.1212 F (780) 939.3194

#### **Red Deer Office**

Provincial Building, #303, 4920 - 51 Street Red Deer, AB T4N 6K8 T (403) 340.5241 F (403) 340.5599

NRCB Response Line: 1.866.383.6722 Email: info@nrcb. ca Web Address: www.nrcb.ca

Copies of the *Agricultural Operation Practices Act* can be obtained from the Queen's Printer at www.qp.gov.ab.ca or through the NRCB website.