

## Decision Summary RA22008

This document summarizes my reasons for issuing Approval RA22008 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA22008. All decision documents and the full application are available on the Natural Resources Conservation Board (NRCB) website at [www.nrcb.ca](http://www.nrcb.ca) under Confined Feeding Operations (CFO)/CFO Search. My decision is based on the act and its regulations, the policies of the NRCB, the information contained in the application, and all other materials in the application file.

Under AOPA this type of application requires an approval. For additional information on NRCB permits please refer to [www.nrcb.ca](http://www.nrcb.ca).

### 1. Background

On January 31, 2022, Noah Kennedy, with the permission of the landowners Ruth and Malcolm MacEachern (the co-landowners), submitted a Part 1 application to the NRCB to construct a new beef CFO.

The Part 2 application was submitted on July 11, 2022. On July 20, 2022, the NRCB deemed the application complete.

The proposal involves:

- a new CFO with 2,250 beef finishers
- constructing eight feedlot pens with a cumulative dimensions of 243.8 m x 121.9 m
- constructing four catch basins 15 m x 40 m x 2.4 m deep each.

The application was initially processed by NRCB approval officer Jeff Froese; however, due to Mr. Froese's departure from the NRCB, the application was transferred to approval officer Francisco Echegaray on September 26, 2022.

#### a. Location

The proposed CFO is located at SE 27-45-13 W4M in Flagstaff County, roughly 17 km south of Viking, AB. The proposed CFO is located near the top of a ridge that slopes to the north and south. Overall, the land surrounding the site is characterized by knob and kettle terrain that generally slopes to the west and southwest. The closest water way is an intermittent seasonal, and cropped through, drainage north of the proposed feedlot, located within 100 m of the proposed CFO.

### 2. Notices to affected parties

Under section 19 of AOPA, the NRCB notifies (or directs the applicant to notify) all parties that are "affected" by an approval application. Section 5 of AOPA's Part 2 Matters Regulation defines "affected parties" as:

- In the case where part of a CFO is located, or is to be located, within 100 m of a bank of a river, stream or canal, a person or municipality entitled to divert water from that body within 10 miles downstream
- the municipality where the CFO is located 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 the size of this CFO the specified distance is 1.5 miles. (The NRCB refers to this distance as the “affected party radius.”)

A copy of the application was sent to Flagstaff County, which is the municipality where the CFO is to be located. Beaver County is located just beyond the 1.5 miles distance from the CFO, but there are no Intermunicipal Development Plans (IDP) between Flagstaff County and Beaver County.

In relation to the first bullet above, in the available maps, it appears that there is an intermittent seasonal drainage north of the proposed CFO that is crossed through. The intermittent seasonal drainage runs for approximately  $\frac{3}{4}$  of a mile before it joins a permanent wetland that is connected to Iron Creek.

In this case, the seasonal drainage next to the proposed CFO is intermittent (and mapped as such) and not a permanent stream in the same category as a river or irrigation canal. Therefore, the 100 m distance for inclusion in notice does not apply; the 10 miles downstream consideration does not apply; and persons or municipalities entitled to divert water from water bodies downstream from the seasonal drainage are not entitled to notice, or to be “affected” parties.

The NRCB gave notice of the application by public advertisement in the Community Press on July 20, 2022. The full application was made available for viewing during regular business hours and was posted on the NRCB website for public viewing. As a courtesy, 24 letters were sent to people identified by Flagstaff County as owning or residing on land within the affected party radius.

### **3. Notice to other persons or organizations**

Under section 19 of AOPA, the NRCB may also notify persons and organizations the approval officer considers appropriate. This includes sending applications to referral agencies which have a potential regulatory interest under their respective legislation.

Referral letters and a copy of the complete application were emailed to Alberta Health Services (AHS), and Alberta Environment and Protected Areas (EPA). I also sent a copy of the application to Iron Creek Gas Co-op Ltd., Alberta Gas Trunk Line Co. Ltd., and Axiom Oil and Gas Inc. as they hold utility rights of ways at the application site.

Ms. Laura Partridge, a senior water administrator with EPA, indicated that licensing under the *Water Act* is required for the proposed CFO. She did not otherwise comment on the application.

To date, I have not received correspondence from AHS or the above noted utility right of way holders in response to the referral letters sent to them.

#### **4. Alberta Land Stewardship Act (ALSA) regional plan**

Section 20(10) of AOPA requires that an approval officer must ensure the application complies with any applicable ALSA regional plan. There is no ALSA regional plan for the area where the proposed CFO is to be located.

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

I have determined that the proposed CFO is consistent with the land use provisions of Flagstaff County's municipal development plan. (See Appendix A for a more detailed discussion of the county's planning requirements.)

#### **6. AOPA requirements**

With respect to the technical requirements set out in the regulations, the proposed CFO:

- 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 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 protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 10, the application meets all relevant AOPA requirements.

#### **7. Responses from municipality and other directly affected parties**

Directly affected parties are entitled to a reasonable opportunity to provide evidence and written submissions relevant to the application and are entitled to request an NRCB Board review of the approval officer's decision. Not all affected parties are "directly affected" under AOPA.

Municipalities that are affected parties are identified by the act as "directly affected." Flagstaff County is an affected party (and directly affected) because the proposed CFO is located within its boundaries.

Rosemary Hoyland, a development officer with Flagstaff County, provided two written responses on behalf of Flagstaff County. In her initial response, Ms. Hoyland stated that the application is consistent with the county's municipal development plan.

In her second correspondence, Ms. Hoyland responded to concerns from other parties that the NRCB had forwarded to her, as the concerns fell beyond the mandate of AOPA.

The application's consistency with the land use provisions of Flagstaff County's municipal development plan, and the second correspondence from the county are discussed in Appendix A attached.

Apart from municipalities, any member of the public may request to be considered "directly affected." The NRCB received responses from 13 parties.

Of the 13 parties who submitted responses, 8 own or reside on land within the 1.5 mile notification radius for affected persons. Because of their location within this radius, and because they submitted a response, they qualify for directly affected party status. (See NRCB Operational Policy 2016-7: Approvals, part 6.2). One of these responses is in support of the application.

The other five respondents do not own or reside on land within the 1.5 mile radius for affected persons. Appendix B sets out my reasons for determining which respondents are directly affected.

The directly affected parties raised concerns regarding the impact on surface and groundwater, disposal of dead animals and livestock diseases, nuisances, impacts to roads, invasive weeds potentially related to a CFO, the applicant's past history regarding livestock management, and property values. These concerns are addressed in Appendix C.

## **8. Environmental risk of CFO facilities**

New CFO facilities which clearly meet or exceed AOPA requirements are automatically assumed to pose a low risk to surface and groundwater. However, there may be circumstances where, because of the proximity of a shallow aquifer, or porous subsurface materials, an approval officer may require surface and/or groundwater monitoring for the facilities. In this case a determination was made that such circumstances do not exist on this site, and that monitoring is not required.

Nonetheless, as part of my review of this application, I assessed the risk to the environment posed by the CFO's proposed manure storage facilities and manure collection areas. I used the NRCB's environmental risk screening tool (ERST) to assist in my assessment of risk to surface water and groundwater (see NRCB Operational Policy 2016-7: Approvals, part 8.13). The tool provides for a numeric scoring of risks, which can fall within a low, moderate, or high risk range. (A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB website at [www.nrcb.ca](http://www.nrcb.ca).)

The assessment indicated that the potential risks to surface and groundwater were low.

## **9. Other factors**

Because the approval application is consistent with the MDP land use provisions, and meets the requirements of AOPA and its regulations, I also considered other factors.

AOPA requires me to consider matters that would normally be considered if a development permit were being issued. The NRCB interprets this to include aspects such as property line and road setbacks related to the site of the CFO. (Grow North, RFR 2011-01 at page 2). Approval officers are limited to what matters they can consider though as their regulatory authority is limited.

For the county, Ms. Hoyland listed the setbacks required by Flagstaff County's land use bylaw (LUB). The application meets these setbacks.

I have considered the effects the proposed CFO may have on natural resources administered by provincial departments. EPA has not made me aware of statements of concern submitted

under section 73 of the Environmental Protection and Enhancement Act or section 109 of the Water Act in respect of the subject of this application. I received a response from EPA indicating that Noah Kennedy must apply for a water licence. Furthermore, the application meets AOPA's technical requirements.

I am not aware of any written decision of the Environmental Appeals Board for this location (<http://www.eab.gov.ab.ca/status.htm>, accessed November 9, 2022).

Finally, I considered the effects of the proposed CFO on the environment, the economy, and the community, and the appropriate use of land. In doing so, I had before me information in the application, views from referral agencies and Flagstaff County, and my own observations from a site visit.

Consistent with NRCB policy (Approvals Policy 8.7.3), I presumed that the effects in the environment are acceptable because the application meets all of AOPA's technical requirements. In my view, this presumption is not rebutted and the directly affected parties' concerns have been addressed.

Consistent with NRCB policy (Approvals Policy 8.7.3), if the application is consistent with the MDP then the proposed development is presumed to have an acceptable effect on the economy and community. In my view, this presumption is not rebutted and the directly affected parties' concerns have been addressed.

I also presumed that the proposed CFO is an appropriate use of land because the application is consistent with the land use provisions of the municipal development plan (See NRCB Operational Policy 2016-7: Approvals, part 8.7.3.). In my view, this presumption is not rebutted, and I note that Flagstaff County's response also states that the application is consistent with their MDP.

## **10. Terms and conditions**

Approval RA22008 specifies the cumulative permitted livestock capacity as 2,250 beef finishers and permits the construction of the eight feedlot pens and four catch basins.

Approval RA22008 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 RA22008 includes conditions that generally address construction deadlines and construction inspections. For an explanation of the reasons for these conditions see Appendix D.

## **11. Conclusion**

Approval RA22008 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA22008.

November 25, 2022

(Original signed)  
Francisco Echegaray, P.Ag.  
Approval Officer

### **Appendices:**

- A. Consistency with the municipal development plan
- B. Determining directly affected party status
- C. Concerns raised by directly affected parties
- D. Explanation of conditions in Approval RA22008

## **APPENDIX A: Consistency with the municipal development plan**

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

This does not mean consistency with the entire MDP. In general, “land use provisions” cover MDP policies that provide generic directions about the acceptability of various land uses in specific areas.

Conversely, “land use provisions” do not call for discretionary judgements relating to the acceptability of a given confined feeding operation (CFO) development. Similarly, section 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.”) “Land use provisions” also do not impose procedural requirements on the NRCB. (See NRCB Operational Policy 2016-7: Approvals, part 8.2.5.)

The proposed CFO is located in Flagstaff County and is therefore subject to that county’s MDP. Flagstaff County adopted the latest revision to this plan in August 2018, under Bylaw #10/18.

Policies 10 to 14 under Section 7 of the county’s MDP deal specifically with CFOs.

Policy 10 states that the county will provide input to the NRCB regarding applications for new or expanded CFOs. All CFOs and manure storage facilities must fully satisfy all the requirements and regulations adopted under AOPA, specifically the minimum distance separation and landbase requirements.

In her initial response to the application, the county’s development officer indicated that the application is consistent with the MDP, and that no other planning-type documents are associated with the area. The application also meets all relevant AOPA requirements.

This policy refers to the term “minimum distance separation (MDS)”. The MDP does not define this term; I therefore presume that it refers to the MDS requirements in AOPA. Under NRCB policy, approval officers should not consider provisions that are based on or modify the MDS requirements in AOPA. (See Operational Policy 2016-7: *Approvals*, part 8.2.5). At any rate, the application meets the AOPA MDS requirements to all residences.

The proposed CFO meets AOPA’s technical requirements for landbase requirements.

Policy 11 requires CFOs to meet the minimum distance separations set out in AOPA.

As mentioned in the previous policy, under NRCB policy, approval officers should not consider provisions that are based on or modify the MDS requirements in AOPA. (See Operational Policy 2016-7: *Approvals*, part 8.2.5). At any rate, the application meets the AOPA MDS requirements to all residences.

Policy 12 precludes CFOs within 3.2 km of the corporate boundaries of any urban municipality or within 0.8 km of the Growth Node Area Overlay designated on Map 6 - Future Land Use.

The proposed CFO meets these setback requirements.

Policy 13 discourages locating CFOs in environmentally sensitive areas where slope instability and/or groundwater contamination may be of concern.

The proposed CFO meets AOPA's technical requirements, several of which are designed to prevent or minimize manure leakage from CFO facilities and thus to prevent CFO manure from reaching and contaminating groundwater. AOPA requirements are also intended to protect the soil, groundwater, and surface water from contamination caused by excessive application of manure nutrients. Therefore, I have determined that the application is not inconsistent with policy 13.

Policy 14 states for the purposes of implementing the regulations adopted under the Agricultural Operation Practices Act, the policies of any "other statutory" within Flagstaff County respecting confined feeding operations shall also be applied, in addition to the policies of this plan.

I interpret this policy's reference to "other statutory" to refer to statutory plans under the Municipal Government Act, which would include the county's MDP and any Intermunicipal Development Plans (if applicable).

This application meets the applicable requirements of Flagstaff County's MDP as noted above, and there are no intermunicipal development plans that apply to the application site.

For these reasons, I conclude that the application is consistent with the land use provisions of Flagstaff County's MDP.

#### Additional comments from the County

On a second response from the county, the development officer indicated that if noxious weeds are an issue at this site, the county could issue a weed notice to the operator. The county also requested the number of truck routes and traffic (daily/monthly), in order to manage the development.

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. In addition, municipalities have the knowledge, expertise and have the jurisdiction to implement and enforce road use restrictions and road use agreements.



## APPENDIX B: Determining directly affected party status

The following individuals qualify for directly affected party (DAP) status because they submitted a response to the application and they own or reside on land within the “affected party radius,” as specified in section 5(c) of the Agricultural Operation, Part 2 Matters Regulation (see NRCB Operational Policy 2016:7 – Approvals, part 6.2):

Malcolm MacEachern  
Section 27-45-13 W4M  
This DAP submitted a letter  
supporting the application

Leda and Roy Johnson  
NW 24-45-13 W4M

Terry and Shelly Brodie  
NE 15-45-13 W4M

Garth Johnson  
NW 24-45-13 W4M

David Prichard  
SW 23-45-13 W4M

Dan and Shelley Prichard  
SW 23 45-13 W4M and,  
SE 16-45-13 W4M

Elaine Newby  
stated as SE 27-45-13 W4M; however, I  
corrected it (SE 26-45-13 W4M)

Jean Prichard  
SW 23-45-13 W4M

A person who is not specified in section 5 of the Part 2 Matters Regulation as an affected party can also qualify for directly affected party status. However, they have the burden to demonstrate they are directly affected by the application. The following individuals that submitted a response to the application may fall under this category:

Myrna and James Mackey  
SE 24-45-13 W4M

Susan Sereda  
SW 14-45-13 W4M

Travis Morken  
NE 29-45-13 W4M

Andrew Marcus  
Part of NE 24-45-13 W4M

Gayle Nikiforuk  
NW and SW 20-45-13 W4M

Under NRCB policy, a person has the burden of demonstrating that they are directly affected by an application. In order to meet their burden of proof, the person has to demonstrate all the following five elements (see NRCB Operational Policy 2016:7 – Approvals, part 6.3):

1. A plausible chain of causality exists between the proposed project and the effect asserted;
2. The effect would probably occur;
3. The effect could reasonably be expected to impact the party;
4. The effect would not be trivial; and
5. The effect falls within the NRCB regulatory mandate under AOPA.

The individuals raised concerns regarding impacts to surface and groundwater, water quantity, increase in traffic (safety), dead animal disposal and predators, impact in the future of the

community, nuisances (odours, flies, and noise), airborne particles and air pollution, loss of quality of life in the community, property values, runoff towards the Iron Creek, weed control, animal welfare, and negative social media.

One of these parties had a concern related to bonds or insurance in event the proposed CFO would have adverse effects on them. It should be noted that the NRCB does not require an applicant to post a bond or have insurance for adverse effects on those surrounding them.

Using the above-mentioned factors, I concluded that none of these individuals who are located outside of the affected party radius established a sufficient chain of causality between the effects they asserted and the proposed CFO. This is largely due to distance from the proposed CFO, which also lessens the probability of the effects occurring and the reasonable expectation of impact upon these individuals. As such, they will not be considered directly affected parties in my review of this application.

In addition, effects related to dead animal disposal and predators, property values, weed control, animal welfare, and negative social media fall outside the NRCB's regulatory mandate under AOPA.

I would like to note that all of the concerns raised by these individuals are also the concerns raised by the directly affected parties. Those concerns are discussed in Appendix C below.

## APPENDIX C: Concerns raised by directly affected parties

The directly affected parties (DAPs) raised the following concerns which are listed and summarized below, together with my analysis and conclusions:

- 1. Increase in odours, flies and nuisances** – A few of the people responding to the application expressed concern about a potential increase in odours, flies, harmful gases and the impact on air quality (ammonia).

### **Approval officer's conclusions:**

AOPA's minimum distance separation (MDS) is a means for mitigating odours and other nuisance impacts from CFO facilities. Noah Kennedy's proposed CFO will be located outside of the required MDS from other existing residences. The closest neighbouring residence will be more than 1,000 m away from the nearest CFO facility. This distance exceeds the required 511 m MDS to that residence. It is presumed that nuisance effects from the CFO facilities are acceptable if the MDS has been met.

Nuisance and other impacts outside of the MDS for a CFO are typically not considered when making a permitting decision, unless there is a direct and adverse impact greater than what may normally be expected, which can be directly linked to the CFO. These effects would be considered in the analysis on 'effects on the community' in an approval officer's decision. In this case, the land zoning within one mile of the operation is 'Agriculture'. Although I do not consider nuisance concerns as 'trivial' in nature, I presume the impacts of the proposed CFO as acceptable, because of the land zoning and MDS requirements as laid out in AOPA have been met.

It is reasonable to expect that there will be some odour emissions and other potential nuisances when the new CFO is developed.

Operators are expected to control flies at their operation. If necessary, the NRCB can require the operator to adopt a fly control program.

Often, any issues that arise relating to the operation of a CFO, and other disagreements, can be resolved through good communication between neighbours and the CFO operator. However, if a member of the public has concerns regarding a CFO, including whether the operation is complying with AOPA, they may contact the NRCB through its toll free reporting line (1-866-383-6722). An NRCB inspector will follow up on the concern.

- 2. Road use, safety and traffic (dust)** – Most of the parties were concerned about an increase in traffic on the county road and the access to it from highway 36, posing a safety risk. One of the respondents suggested that the applicant should be responsible to fix damages to the road (post a bond).

### **Approval officer's conclusions**

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). In addition, municipalities own the roads within their

jurisdiction, have the knowledge and expertise to determine what is required in road use agreements, and have the jurisdiction to implement and enforce road use restrictions and road use agreements.

- 3. Groundwater quality** – Most of the respondents were concerned with the potential contamination of groundwater. Some of the respondents questioned whether there should be monitoring of the catch basins.

#### **Approval officer's conclusions**

As noted in the decision summary above, and documented in Technical Document RA22008, the proposed CFO facilities meet all AOPA technical requirements. Several of these requirements are designed to prevent or minimize manure leakage from CFO facilities and thus to prevent manure from reaching and contaminating groundwater.

As noted in section 8 of the decision summary, I assessed the CFO's proposed facilities, using the NRCB's environmental risk screening tool (ERST), in order to determine the level of risk they pose to groundwater. The CFO's proposed facilities pose a low potential risk to groundwater. Therefore, I determined that groundwater monitoring is not required.

Regulations under AOPA set nutrient application limits to prevent soils from being overloaded with nitrogen and minimize the potential for groundwater to be impacted by manure. The Standards and Administration Regulation under AOPA also requires operators to test soils, on farmland to which manure is applied, for salts and nitrogen at least every three years and to make these records available for inspection by the NRCB.

- 4. Groundwater supply** – Most of the people responding to the application were concerned about the potential impact on groundwater quantity in the area. A couple of the respondents questioned whether the applicant should compensate the neighbours for the loss of water (water wells).

#### **Approval officer's conclusions**

Alberta Environment and Protected Areas (EPA) is responsible for licensing the use of groundwater and surface water in the province. The water licensing process generally includes an opportunity for neighbours to provide input. 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 3 of 63 of Technical Document RA22008.)

EPA indicated in its response that an application for a water license and a groundwater evaluation report under the *Water Act* are required. The applicant is reminded that they need to obtain all applicable licences and permits.

A copy of this decision will also be forwarded to EPA for its information.

AOPA does not empower an approval officer to require a bond or insurance for adverse effects on those surrounding them.

5. **Property values** – A couple of the parties felt that the CFO will reduce the value of their farm property.

**Approval officer's conclusions**

In several review 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 of permit applications.

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..." (Zealand Farms, RFR 2011-02 at 5, and Pigs R Us Inc. RFR 2017-11/BA17002 at 6.)

As explained in Appendix A above, Noah Kennedy's application is consistent with the land use provisions of the county's MDP, which suggests that the proposed CFO is an appropriate land use in the area.

6. **Dead animal disposal, livestock diseases (predators and animal disease transmission) and noxious weeds from feed** – A few of the individuals raised concerns about the disposal of dead animals and the resulting potential increase in the number of predators attracted to the area. One respondent was concerned about disease transmission from the applicant's cattle to their purebred cattle herd. One of the respondents was concerned about the presence of noxious weeds in the feed arriving to the CFO.

**Approval officer's conclusions**

AOPA does not require approval officers to assess or consider dead animal disposal when considering CFO applications. Dead animal disposal is regulated by the *Animal Health Act* enforced by the Animal Health and Assurance Division of Alberta Agriculture and Irrigation (AGI). Because AGI has expertise in this area, the NRCB defers to this greater expertise and refers related concerns to AGI.

All landowners or occupants of land are responsible for controlling pests, under the *Agricultural Pests Act* of Alberta.

AGI monitors livestock diseases within the province through the office of the provincial veterinarian, and is able to address disease concerns should they arise. AOPA does not address transmission of animal diseases and therefore does not require approval officers to assess or consider animal disease transmission as part their review of a permit application. Owners and operators of CFOs are acutely aware of the potential for disease transmission and generally take steps to ensure that they protect their livestock, including strict biosecurity protocols.

AOPA does not require approval officers to assess or consider noxious weed control when considering CFO applications, as it is regulated by the *Weed Control Act* under AGI. Additionally, as indicated by the county's development officer, if noxious weeds are an issue at this site the county could issue a weed notice to the operator.

7. **Health risk and air quality (gases)** – A couple of the respondents were concerned about the transmission of zoonotic diseases, gas and chemical emissions from the CFO (pharmaceuticals, pathogens, nutrients and pesticides).

**Approval officer’s conclusions**

Approval officers generally refer applications to Alberta Health Services (AHS) for its information, and for it to respond to any potential health issues related to the proposed developments. The NRCB referred the application to AHS for its comments; however, AHS has not yet submitted a letter responding to the referral letter.

As mentioned in the previous subsection # 6, Alberta Agriculture and Irrigation monitors livestock diseases within the province and is able to address disease concerns should they arise.

Based on my experience, and from previous responses by AHS to similar health related concerns, general air quality is addressed and mitigated by the minimum distance separation (MDS), guidelines and industry best practices. AOPA’s MDS is a means for mitigating odours and other nuisance impacts from CFO facilities. Noah Kennedy’s proposed CFO will be located outside of the required MDS from other existing residences. The closest neighbouring residence will be more than 1,000 m away from the nearest CFO facility. This distance exceeds the required 511 m MDS to that residence. It is presumed that nuisance effects from the CFO facilities are acceptable if the MDS has been met.

Additionally, as noted in section 6 of the decision summary, and further documented in Technical Document RA22008, the proposed CFO meets all AOPA technical requirements, including: setbacks from springs, common bodies of water, and water wells; having sufficient means to control surface runoff of manure; nutrient management requirements regarding the land application of manure; and groundwater protection requirements for the floors and liners of manure storage facilities.

8. **Surface water** – Most of the respondents have concerns related to the impact of the CFO on surface water quality. Some of the respondents indicated that there is an unnamed water course north of the feedlot that eventually drains into the Iron Creek. There are wetlands and many bodies of water in the near vicinity. The individuals were concerned that the bodies of water will be contaminated by nutrients and pathogens, which can affect wildlife, and whether the catch basin will be monitored.

**Approval officer’s conclusions**

AOPA and its regulations contain several requirements to prevent or minimize manure leakage from CFO facilities and thus to prevent CFO manure from reaching and contaminating surface water. Two of these requirements are the setbacks from springs and common bodies of water set out in Section 7(1)(a) and (c) of the Standards and Administration Regulation, which prohibits the construction of a manure storage facility or manure collection area less than 100 m from a spring and 30 m from a common body of water.

During my site visits, I did not note any springs or common bodies of water within 100 m and 30 m, respectively, of the proposed CFO facilities. I also verified these distances by

reviewing available air photos. The proposed CFO meets all of the AOPA setbacks requirements.

Additionally, I consulted a topographic map to determine the general slope of the land. I found that the terrain at the site, where the pens and the runoff control catch basins will be constructed is undulating with a general slope to the north and south. As the facilities will be built on a high ground, the runoff could potentially run to the west, southwest and to the east.

As noted in section 8 of the decision summary, I assessed the CFO's proposed facilities, using the NRCB's ERST, in order to determine the level of risk they pose to surface water. The CFO's proposed facilities pose a low potential risk to surface water.

As noted in the decision summary above, and further documented in Technical Document RA22008, the proposed CFO meets all AOPA technical requirements. Because the CFO meets or exceeds these requirements, I concluded that the level of risk to surface water posed by the proposed CFO facilities is acceptable. In my view, monitoring of the catch basin is not required.

Incidences of non-compliance can be reported to the NRCB's 24 hour a day toll free reporting line 1-866-383-6722 (toll free line). NRCB inspectors follow up on all complaints.

- 9. Manure storage and management** – One of the respondents questioned how the manure will be managed at the CFO.

**Approval officer's conclusions**

Cattle manure from feedlots is dry manure that can be stockpiled on a short-term basis. In Technical Document RA22008 (page 11 of 63), the applicant indicated they plan to use short-term manure storage as part of the manure storage and handling plan.

Additionally, the application also provides sufficient runoff control catch basin volume to capture the manure impacted runoff from the feedlot pens.

Section 5 of the Standards and Administration Regulation allows storage of solid manure, composting material, or compost for a short term. AOPA has manure application regulations, and requirements that govern the storage of manure, including short term solid manure storage. The applicant is aware of all regulations pertaining manure storage and application and has demonstrated in their application that they are able to meet them.

If a member of the public has concerns regarding a CFO's manure storage and/or manure application procedure, they are invited to phone the NRCB toll free reporting line 1-866-383-6722. An NRCB inspector will respond to the complaint.

- 10. High density of farms in the area** – One of the parties indicated that there are more than 10 farms in the area that will be impacted by this new CFO.

### **Approval officer's conclusions**

There are a substantial number of farms and acreages in the area. However, all of the residences on them have been considered in terms of AOPA's required MDS setback to residences. In addition, as noted in Appendix A above, the proposed CFO is consistent with the land use provisions in the county's municipal development plan. This consistency suggests that the proposed CFO is an appropriate land use for the area.

- 11. Animal welfare and past history** - The respondents were concerned with the animal welfare at the CFO, as the applicant has had issues with lack of animal care and was charged by the SPCA. A few people indicated that they have serious concerns about the applicant being allowed to construct a feedlot due to his past issues with lack of animal care.

### **Approval officer's conclusions**

Animal welfare is the responsibility of the Food Safety and Animal Welfare Division of Alberta Agriculture and Irrigation (AGI), other agencies such as the SPCA, and livestock groups. Animal welfare does not fall under AOPA and is therefore not considered as part of my review of the application. Operators are responsible for the welfare of the livestock under their care and control.

The NRCB forwarded the concerns related to animal care to the Alberta Society for the Prevention of Cruelty to Animals (SPCA). In their response, the SPCA confirmed a conviction in 2015 under the Animal Protection Act. However, the SPCA indicated that issues related to AOPA are outside the scope of the Alberta SPCA and as such they take no position regarding the review process. However, if there are welfare concerns relative to animals in the care of the applicant, SPCA peace officers have authority to investigate and relieve animals in distress, as well as ensure the ongoing care for both livestock and companion animals.

The AOPA permit decision process is based on the merits of current permit applications. In addition, the nature and location of the applicant's previous animal operation (cattle) are sufficiently distinct that the supposed impacts of that operation shed little light on the potential impacts of the proposed new CFO

- 12. Animal density of the feedlot pens** – One of the respondents was concerned that the animal density in the application is higher than the minimum space required per animal by Alberta Agriculture and Irrigation (AGI)'s guidelines. He included the guideline with his response.

### **Approval officer's conclusion:**

AOPA does not prescribe the animal density required per animal in proposed CFOs. AGI and the NRCB have a Technical Guideline that provides guidance to calculate the livestock capacity of operations as they existed on January 1, 2002. This guideline is intended to provide recommendation on deemed and grandfathered operations; however, it does not provide animal densities for new CFOs.

Space allocations for beef cattle are based on many factors, including pen size and bunk length for full and limited feed, herd management, pen floors and liners, and feeding frequency, amongst others.



## **APPENDIX D: Explanation of conditions in Approval RA22008**

Approval RA22008 includes several conditions, discussed below:

### **a. Groundwater protection requirements**

Noah Kennedy proposes to construct the new feedlot pens and the runoff control catch basins with a 1.5 metre thick naturally occurring protective layer. Section 9 of AOPA's Standards and Administration Regulation specifies a maximum hydraulic conductivity for this type of protective layer in order to minimize leakage.

Noah Kennedy measured the hydraulic conductivity of the protective layer by installing monitoring wells (or water table well) at the time of borehole drilling. This approach provides an adequate representation of the protective layers proposed to be used to protect the groundwater resource.

The regulations provide that the actual hydraulic conductivity of a 2 metre and a 5 metre thick naturally occurring protective layer must not be more than  $1 \times 10^{-6}$  cm/sec, for solid manure storages (pens) and runoff control catch basins, respectively.

In this case, the in-situ measurement was  $4.3 \times 10^{-7}$  cm/sec and  $4.05 \times 10^{-7}$  cm/sec, for the pens and the catch basins, respectively. These values are below (better) than the maximum value in the regulations. Therefore, the proposed naturally occurring protective layer meets the hydraulic conductivity requirement in the regulations.

To provide additional assurance that the as-built runoff control catch basins adequately protects groundwater, Approval RA22008 includes a post-construction inspection condition (see section c below).

### **b. Construction Deadline**

Noah Kennedy proposed to complete construction of the proposed new feedlot pens and runoff control catch basins by September 30, 2022. As this deadline has already passed, and in my opinion a construction schedule that allows at least three construction seasons is more practical and realistic for the proposed development, a deadline of November 30, 2025 is included as a condition in Approval RA22008.

### **c. Post-construction inspection**

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, and to reduce risk to the operator, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Approval RA22008 includes conditions stating that the co-permit holders shall not place livestock or manure in the manure storage or collection portions of the new feedlot pens or manure impacted runoff in the new runoff control catch basins, until NRCB personnel have inspected them and confirmed in writing that they meet the approval requirements.