



Decision Summary RA24030

This document summarizes my reasons for issuing Approval RA24030 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24030. 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.

Under AOPA this type of application requires an approval. For additional information on NRCB permits please refer to www.nrcb.ca.

1. Background

On June 14, 2024, Craig Ference on behalf of Ference Land and Cattle Corp. (Ference) submitted a Part 1 application to the NRCB to expand an existing beef CFO.

The Part 2 application was submitted on June 14, 2024. On July 3, 2024, I deemed the application complete.

The proposed expansion involves:

- Increasing livestock numbers from 6,000 to 9,000 beef finishers
- Constructing livestock pens 61, 71, 81 and 91 – 238 m x 62 m (total)
- Expanding south runoff control catch basin – 61 m x 40 m x 4 m (total dimensions)
- Expanding north runoff control catch basin – 90 m x 40 m x 4 m (total dimensions)
- Constructing livestock pens 28, 29, 30 – 360 m x 65 m (total)
- Constructing livestock pens 12, 13, 20 – 360 m x 65 m (total)
- Change the previously permitted north livestock pens dimensions to 360 m x 137 m (total dimensions (2 rows)) from 335 m x 137 m

a. Location

The existing CFO is located at E½ 17-34-2 W4M and SW 17-34-2 W4M in Special Area No. 4, approximately 4 km east of Kirriemuir, Alberta. The terrain is slightly hummocky with a general slope to the south and southwest, as well as to the north and northeast.

b. Existing permits

To date, the CFO has been permitted under NRCB Approval RA24001, issued April 12, 2024. That permit allowed the construction and operation of a 6,000 head beef finisher CFO. The CFO's existing permitted facilities are listed in the appendix to the Approval RA24030.

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 two (2) miles. (The NRCB refers to this distance as the “notification distance”.)

None of the CFO facilities are located within 100 m of a bank of a river, stream, or canal.

A copy of the application was sent to Special Area No. 4, which is the municipality where the CFO is located.

The NRCB gave notice of the application by:

- posting it on the NRCB website,
- public advertisement in Consort Enterprise newspaper in circulation in the community affected by the application on July 3, 2024, and
- sending 22 notification letters to people identified by Special Area No. 4 as owning or residing on land within the notification distance.

The full application was made available for viewing during regular business hours.

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.

A referral letter and a copy of the complete application were emailed to Alberta Environment and Protected Areas (EPA).

I also sent a copy of the application to Telus and Dry Country Gas Co-op Ltd. as they are utility right of way holders.

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 existing CFO is located.

5. Municipal Development Plan (MDP) consistency

I have determined that the proposed expansion is consistent with the land use provisions of the Special Area No. 4 municipal development plan (MDP), as well as with the land use provisions of Special Area No. 4’s land use order (LUO). (See Appendix A for a more detailed discussion of the Special Area’s planning requirements.)

6. AOPA requirements

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

- Meets the required AOPA setbacks from all nearby residences (AOPA setbacks are known as the “minimum distance separation” requirements, or MDS)
- Meets the required AOPA setbacks from springs, and common bodies of water
- Has sufficient means to control surface runoff of manure
- Meets AOPA’s nutrient management requirements regarding the land application of manure
- Meets AOPA groundwater protection requirements for the design of floors and protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 11 and in Appendix E, the application meets all relevant AOPA requirements. The exemptions that are required to address the AOPA requirements around water wells are discussed in the following parts of this decision summary.

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.” Special Area No. 4 is an affected party (and directly affected) because the proposed expansion is located within its boundaries.

Ms. Taryl Abt, a development officer, with Special Area No. 4, provided a written response on behalf of Special Area No. 4. Ms. Abt stated that the application is consistent with Special Area No. 4’s land use provisions of the municipal development plan. She also stated that the application was within the land use provision under the Agricultural District, and not within a restricted area under the Land Use Order. The application’s consistency with the land use provisions of Special Area No. 4’s municipal development plan and the land use order is addressed in Appendix A, attached. Special Area No. 4’s provided several comments which are discussed in Appendix C.

Apart from municipalities, any member of the public may request to be considered “directly affected.” The NRCB received a response from 1 individual.

The person who submitted a response owns land within the 2 mile notification distance for affected persons. Because of their location within this distance, and because they submitted a response, they qualify for directly affected party status. (See NRCB Operational Policy 2016-7: Approvals, part 7.2.1)

The directly affected party raised concerns regarding surface water run-off from the cow-calf portion of the operation and on-going compliance related issues. These concerns are addressed in Appendix B.

8. Environmental risk of CFO facilities

When reviewing a new approval application for an existing CFO, NRCB approval officers assess the CFO’s existing buildings, structures, and other facilities. In doing so, the approval officer

considers information related to the site and the facilities, as well as results from the NRCB's environmental risk screening tool (ERST). The assessment of environmental risk focuses on surface water and groundwater. The ERST 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.) However, if those risks have previously been assessed, the approval officer will not conduct a new assessment unless site changes are identified that require a new assessment, or the assessment was supported with a previous version of the risk screening tool and requires updating. See NRCB Operational Policy 2016-7: Approvals, part 9.17.

In this case, the risks posed by Ference's existing CFO facilities were assessed in March 2024 using the ERST. According to that assessment, the facilities posed a low potential risk to surface water and groundwater.

There have been no changes related to groundwater or surface water protection, water wells, or CFO facilities since that assessment was done. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

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 monitoring for the facility. I assessed the proposed pens, using the NRCB's risk screening tool due to the setback to a water well, and determined they pose a low potential risk to groundwater and surface water.

9. Exemptions

I determined that the proposed pens are located within the required AOPA setback from a water well. As explained in Appendix D, an exemption to the 100 m water well setback is warranted due to the proper construction of the well and its location.

10. Other factors

Because the approval application is consistent with the MDP and LUO 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.

Ms. Abt listed the setbacks required by Special Area No. 4's LUO and noted that the application meets the recommended facility setbacks.

I have considered the effects the proposed expansion 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 under section 109 of the *Water Act* in respect of the subject of this application. 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 July 29, 2024).

Finally, I considered the effects of the proposed expansion on the environment, the economy, and the community, and the appropriate use of land.

Consistent with NRCB Operational Policy 2016-7: Approvals, part 9.10.9, I presumed that the effects on 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 party's concerns have been addressed because the feedlot portion of the operation meets the AOPA requirements. Appendices B and C discuss environmental effects.

Consistent with NRCB Operational Policy 2016-7: Approvals, part 9.10.9, if the application is consistent with the land use planning provisions of 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.

I also presumed that the proposed expansion is an appropriate use of land because the application is consistent with the land use provisions of the land use order (see NRCB Operational Policy 2016-7: Approvals, part 9.10.9). In my view, this presumption is not rebutted.

11. Terms and conditions

Approval RA24030 specifies the cumulative permitted livestock capacity as 9,000 beef finishers and permits the expansion of the north and south catch basins, construction of additional livestock pens (61, 71, 81, 91, 28, 29, 30, 12, 13, 20) and the change in dimensions of previously permitted north livestock pen area.

Approval RA24030 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 RA24030 includes conditions that generally address construction deadlines, construction inspections, and the use of pens for CFO purposes. For an explanation of the reasons for these conditions, see Appendix E.

For clarity, and pursuant to NRCB policy, I consolidated the following permit with Approval RA24030: Approval RA24001 (see NRCB Operational Policy 2016-7: Approvals, part 11.5). Permit consolidation helps the permit holder, municipality, neighbours and other parties keep track of a CFO's requirements, by providing a single document that lists all the operating and construction requirements. Consolidating permits generally involves carrying forward all relevant terms and conditions in the existing permits into the new permit, with any necessary changes or deletions of those terms and conditions. This consolidation is carried out under section 23 of AOPA, which enables approval officers to amend AOPA permits on their own motion.

12. Conclusion

Approval RA24030 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24030.

Ference's previously issued Approval RA24001 is therefore superseded, and its content consolidated into this Approval RA24030, unless Approval RA24030 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Approval RA24001 will remain in effect.

September 6, 2024

(Original signed)

Nathan Shirley
Approval Officer

Appendices:

- A. Consistency with the municipal land use planning
- B. Concerns raised by directly affected parties
- C. Response from Special Areas No. 4
- D. Exemptions from water well setbacks
- E. Explanation of conditions in Approval RA24030

APPENDIX A: Consistency with municipal land use planning

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). An MDP is a statutory plan provided for under section 632 of Part 17 of the *Municipal Government Act* (MGA).

The Special Areas Board is constituted under the *Special Areas Act*. The Special Areas Board has also adopted a Land Use Order (LUO) to regulate and control the use and development of lands and buildings within Special Areas 2, 3 and 4, and to facilitate orderly and economic development in those areas.

Ference Land & Cattle’s CFO is located in Special Area No. 4 and is therefore subject to the Special Areas Board LUO. (The LUO was enacted on March 3, 2015, under Ministerial Order No. MSL:007/15.) The LUO may be helpful for the purposes of AOPA’s MDP consistency requirement. See NRCB Operational Policy 2016-7: Approvals, part 9.2.5.

The Special Areas Board does have an MDP that was approved on February 23, 2021. It does not have any specific mention of CFOs, rather the agriculture section provides guiding principles regarding the promotion of the agriculture sector within the area. It states that they will “review the Land Use Order for opportunities to support Agricultural diversification...”. Based on this the LUO will be used for assessing land use provisions consistency.

While I will treat the Special Areas Board’s LUO as an MDP, I will still focus on the LUO’s “land use provisions.” The NRCB interprets the term “land use provisions” as covering 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 9.2.7) Under this interpretation, the term “land use provisions” also excludes policies that impose procedural requirements. In addition, section 20(1.1) of AOPA 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.”) Therefore, any tests or conditions in the LUO will not be considered.

Under the LUO, the subject land is currently zoned as Agricultural District. Section 19 of the order states that the “purpose and intent” of this district is to “provide for extensive agriculture, while accommodating similar and compatible uses.” CFOs do not fall within the LUO’s definition of “extensive agriculture.” Nor does the LUO’s list of permitted or discretionary uses for the Agricultural District, in section 19, include CFOs. However, Appendix 2 of the LUO states that CFOs “may be located only within the Agricultural District,” which logically implies that CFOs may be located within that district. Appendix 2 of the LUO also includes four sections that provide further guidance regarding locating CFOs within the Agricultural District.

Section 1. States that “confined feeding operations shall be excluded” from numerous named locations, from provincially recognized “Historical or Cultural sites,” and from an 800 metre zone adjacent to the banks of the Red Deer and South Saskatchewan Rivers.

The proposed CFO expansion is not located within any of these exclusion areas.

Section 2. Areas requiring mitigation – Indicates areas within Special Areas where mitigation is required if CFOs are located there.

The proposed CFO expansion complies with the environmental protection requirements set out in AOPA which do address these recommendations and mitigation.

Section 3. Recommended Facility Setback.

(1) From occupied dwellings, confined feeding operation facilities shall be setback according to the Category 4 Minimum Distance Separation (MDS), with a 1,600.00 metres minimum from occupied dwellings not owned or under the control of the CFO operator, without written consent of the owner/occupant.

(2) Notwithstanding the above, circumstances may dictate an increased MDS based upon localized environmental aspects of topography, wind, and open spaces between the proposed facility and an occupied dwelling not under the control of the CFO. The Municipal Planning Commission shall be provided with the opportunity to provide a substantiated recommendation on any increased MDS.

(3) From towns, villages, hamlets (with multiple dwellings), and community recreational facilities, confined feeding operation facilities shall be set back according to the Category 4 Minimum Distance Separation, with a minimum 3,200.00 metres from the North and West and a minimum 2,400.00 metres from the South and East. The purpose of varied setback distances is to recognize the differing impacts of odour and noise that may be generated by a CFO and carried along the prevailing winds.

(4) Facility setback distances may be reduced through the use of technological developments such as odour limiting biofilters at the facility.

Section 3 refers to the term “minimum distance separation (MDS)”. The LUO 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 9.2.8) Regardless, Ference Land & Cattle’s application meets these LUO policies.

Section 4. Recommended Setback for Manure Disposal - Discusses required setbacks for manure spreading from neighbouring residences, using category 4 Minimum Distance Separation. A minimum manure disposal setback of 1 mile for occupied residences is included. A minimum manure disposal setback of 1.5 to 2 miles (depending on direction) for hamlets with multiple residences and community recreation facilities is also included.

Section 20(1.1) of AOPA states: “In considering ... whether an application is consistent with the municipal development plan land use provisions, an approval officer shall not consider ... any provisions respecting tests or conditions related to the construction of or the site for a confined feeding operation...nor... the application of manure, composting materials or compost.” I have reviewed parts of section 3 and all of section 4 of Appendix 2 of the Special Areas LUO and I have determined them to be provisions respecting tests or conditions related to the construction of a CFO or the application of manure; and therefore, these sections will not be considered.

Irrespective, the operator is required to meet the environmental protection requirements set out in AOPA which do address these recommendations (see Appendix C).

In their response letter, the Development Officer, on behalf of Special Area No. 4 indicated that the Special Areas Municipal Planning Commission has reviewed the application and has provided several recommendations relating to manure spreading, groundwater protection, and NRCB action to address contamination risks. These are discussed in Appendix C.

For these reasons, I conclude that the application is consistent with the relevant land use provisions of the Special Areas Board LUO.

APPENDIX B: Concerns raised by directly affected party

The following individual qualifies for directly affected party status because he submitted a response to the application and he owns or resides on land within the notification distance, as specified in section 5(c) of the Agricultural Operation, Part 2 Matters Regulation: Mr. Kevin Clark (E½ 8-34-2 W4M). (See NRCB Operational Policy 2016-7: Approvals, part 7.2.1)

The directly affected party raised the following concerns:

Run-off of manure impacted water entering wetlands from the cow-calf operation:

The directly affected party raised concern regarding runoff from the site contaminating a wetland from the cow-calf herd and feeding the cow-calf herds during drought conditions. They are also concerned about the NRCB's approach to non-compliance in relation to active and abundant overflow of contaminated water.

Approval officer's conclusion:

AOPA does not consider cow-calf and seasonal feeding and bedding operations as CFOs, and therefore, does not require permits for these types of operation. The NRCB does, however, consider risk to the environment regarding manure. Complaints regarding manure related issues can be reported to the NRCB's 24-hour reporting line (1-866-383-6722) and will be followed up on by an NRCB inspector. The NRCB encourages neighbours to communicate with each other to address questions or concerns they may have.

Cow-calf herds may receive special exemptions during declared drought emergencies however, it is expected that these individuals communicate and work with NRCB staff to ensure they meet the exemption requirements. Details of these considerations can be found in 2024 NRCB provisions for confined feeding of cow-calf herds during drought conditions at <https://www.nrcb.ca/public/download/files/242954>

NRCB Compliance division is actively working on this file regarding the run-off from the cow-calf operation and has been in communication with Special Areas No. 4, EPA, and the applicant to address concerns. Run-off from the MCA/MSF portions of the CFO are directed towards the 2 catch basins on-site with the south feedlot pens sloping to the south catch basin and the north feedlot pens generally sloping to the north catch basin. The cow-calf portion in the southeast of the operation slopes to the south.

APPENDIX C: Response from Special Areas No. 4

In their response, Special Area No. 4 commented the following.

Not all lands identified meet the recommended manure disposal setbacks under Section 4, Appendix 2:

Not all lands identified meet the recommended manure disposal setbacks under Section 4, Appendix 2:

- (1) For occupied dwellings, manure disposal shall be set back according to the Category 4 minimum distance separation, with a minimum of 1600 metres from occupied dwellings not owned or under the control of the CFO operator, without written consent of the owner/occupant.
- (3) from towns, villages, hamlets (with multiple dwellings), and community recreational facilities, manure disposal shall be setback in accordance with Category 4 Minimum Distance Separation, with a minimum 3200 metres from the North and West and a minimum 2400 metres from the South and East of any town, village, hamlet with multiple dwellings or community recreation facility.

Recommendation:

After reviewing the application, the following are areas of concern to the Special Areas Municipal Planning Commission:

- Not all proposed areas for manure disposal meet the SA recommended setbacks according to the Category 4 MDS.

Due to the close proximity to residences, NRCB must ensure the residents are accepting of the manure spreading, with agreements are in place.

Due to the impacts of odor to affected residences within the 2 mile radius from North and West and 1.5 mile radius from South and East of the Hamlet of Kirriemuir, we recommend to the NRCB, that manure disposal does not take place on or immediately prior to long weekends from June-September (late fall spreading is encouraged).

- According to the Risk of Groundwater Contamination Map, Appendix 4 of SA LUO, the proposed area is low risk.

However, because the map is a guide only, it is recommended that the NRCB complete detailed hydrogeological studies at any proposed development site to ensure the groundwater is protected from possible contamination.

- It has been brought to our attention that effluent from the lands within the proposed development area has affected adjacent lands (NE-08-34-02-W4), with evidence of manure contamination to wetlands.

Strongly recommend that the NRCB seek immediate and effective course of action to eliminate the risks of contamination to surface water or groundwater quality.

Approval Officer comments:

As noted in the decision summary above, and further documented in Technical Document RA24030, the proposed expansion meets all AOPA technical requirements. Several of these requirements are designed to prevent or minimize manure leakage from CFO facilities and thus to prevent CFO manure from reaching and contaminating groundwater. Because the proposed expansion meets these requirements, it will not pose a material risk to groundwater.

The land application of manure is addressed in sections 24 of the Standards and Administration Regulation. Section 24 requires manure to be incorporated within 48 hours of application when it is applied to cultivated land, or by surface application on forages, or on no-till cropland (this requires increased setbacks from neighbouring residences).

AOPA has requirements to protect the soil, groundwater, and surface water from excessive application of manure nutrients. These include soil testing requirements, soil salinity limits, nitrate-nitrogen limits, and setbacks from water bodies, water wells, and residences. Operators are required to keep manure spreading and soils sampling records and must provide them to the NRCB upon request.

The applicant has provided adequate land base in the dark brown soil zone for manure application. This meets the AOPA requirement for land base.

AOPA requires setbacks to neighbouring residence of 150 m when manure is not being incorporated, however does not require permission from neighbouring residences. Special Areas No. 4's recommendations were provided to the applicant and it is expected that, through a good neighbour relationship, a respectful relationship can be established between parties. The NRCB encourages neighbours to communicate with each other to address questions or concerns they may have.

Complaints about CFO related issues can be reported to the NRCB's reporting line (1-866-383-6722) and will be followed up on by an NRCB inspector.

Regarding the recommendations concerning run-off, as addressed above in Appendix B, the run-off in question is from cow-calf herd areas which are considered separate from the CFO. NRCB compliance division is actively working on this file to address run off concerns from the cow-calf pens and are working with the applicant, EPA, and Special Areas No. 4. Run-off from the MCA/MSF portions of this CFO are directed towards the 2 catch basins.

APPENDIX D: Exemptions from water well setbacks

1. Water Well Considerations

The proposed pens are to be located less than 100 m from a water well. I have confirmed that 1 water well (2012 well) is located approximately 47 m west of pen 12 and 61 m northeast of pen 91, this was confirmed during a site visit and with Google Earth. This is in conflict with the section 7(1)(b) of the Standards and Administration Regulation (SAR) under AOPA.

Section 7(2), however, allows for exemptions if, before construction, the applicant can demonstrate that the aquifer into which the water well is drilled is not likely to be contaminated by the manure storage facility (MSF)/manure collection area (MCA), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MSF/MCA are presumed to be low if the applicant's proposed MSF/MCA meets AOPA's technical requirements to control runoff and leakage. Approval officers also assess whether the water well itself could act as a conduit for aquifer contamination.

In this case, I felt the following factors were relevant to determine the risk of aquifer contamination via the water well:

- a. How the well was constructed
- b. Whether the well is being properly maintained
- c. Whether the well is up- or down-gradient from the MSF/MCA and whether this gradient is a reasonable indication of the direction of surface and groundwater flow between the two structures

These presumptions and considerations are based on NRCB Operational Policy 2016-7: Approvals, part 9.10.2.

The water well:

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 47 m west of pen 12 and 61 m northeast of pen 91 is likely EPA water well ID # 1435304. This well is reported to have been installed in 2012 and has a perforated or screened zone from 36.58 m to 45.72 m below ground level across stratigraphy. The well was installed with an above ground casing. I note that in my conversations with the applicant, the water well is only used presently to water the livestock. The well's log identifies protective layer or layers from ground surface to 12.8 m below ground level. The well has a bentonite seal from ground surface to 36.58 m below ground level. The well appeared to be in good condition at the time of my site inspection and its casing was protected. The well is down-gradient of half of the CFO and upgradient from the other half.

The NRCB has developed a "water well exemption screening tool," based on the factors listed above, to help approval officers assess the groundwater risks associated with a nearby water well.¹

¹ A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB website at www.nrcb.ca.

In this case, the results of the water well exemption screening tool suggest that an exemption is warranted as seen in Technical Document RA24030 pg. 10.

Under the regulation, an approval officer may require a groundwater monitoring program of the water well in question. In my view, given that the proposed pens meet AOPA technical requirements, and given that the water well exemption screening tool suggests risk of aquifer contamination is low, monitoring is not required.

APPENDIX E: Explanation of conditions in Approval RA24030

Approval RA24030 includes several conditions, discussed below:

1. New conditions in Approval RA24030

a. Groundwater protection requirements

Ference proposes to construct the pens and expanded catch basins with a 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.

Ference measured the hydraulic conductivity of the protective layer by installing a monitoring well (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 thick naturally occurring protective layer must not be more than 1×10^{-6} cm/sec for solid manure storage facilities or solid manure collection areas.

For a catch basin, the regulations provide that the actual hydraulic conductivity of a 5 metre thick naturally occurring protective layer must not be more than 1×10^{-6} cm/sec.

In this case, the in-situ measurement was 2.9×10^{-8} cm/sec for the pens and 4.2×10^{-8} cm/sec for the catch basins. This value is below the maximum value in the regulations. Therefore, the proposed naturally occurring protective layer meets the hydraulic conductivity requirement in the regulations and no additional condition is required.

b. Construction Deadline

Ference proposes to complete construction of the proposed new livestock pens, expansion to the catch basins and change in dimensions to the north livestock pen area by December 2024. Due to unforeseen circumstances that may occur regarding construction timelines I am providing an additional year to the deadline. Therefore, the deadline of December 1, 2025 is included as a condition in Approval RA24030.

c. Post-construction inspection

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed in accordance with the permit requirements. To be effective, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Approval RA24030 includes conditions stating that Ference shall not place livestock or manure in the manure storage or collection portions of the new pens and shall not place manure impacted runoff in the manure storage or collection portions of the expanded catch basins until NRCB personnel have inspected each facility and confirmed in writing that they meet the approval requirements. The completion of pens 8 and 9 from Approval RA24001 is still outstanding and therefore, their conditions are carried forward into the Approval RA24030.

d. Operating Condition

A condition will be included requiring the applicant to ensure that the pens located southeast of the location (Pen 10 and Pen 11) is used solely for cow-calf purposes.