

Decision Summary RA22032

This document summarizes my reasons for issuing Registration RA22032 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA22032. 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 a registration. For additional information on NRCB permits please refer to www.nrcb.ca.

1. Background

On December 12, 2022, Christopher Horvat submitted a Part 1 application to the NRCB to construct a new 6,000 chicken broiler breeder confined feeding operation (CFO) and to construct a broiler breeder barn (14.6 m x 76.2 m).

The Part 2 application was submitted on December 19, 2022. On January 18, 2023, I deemed the application complete.

On February 23, 2023, as a response to the statement of concerns, Christopher Horvat submitted an updated site plan with a new location for the broiler breeder barn. The updated location of the barn is south of the originally proposed location. On the same day, I notified Beaver County of the updated site plan.

a. Location

The proposed CFO is located at NE 29-50-15 W4 in Beaver County, roughly 16 km northeast of Ryley, Alberta. The terrain is nearly level with a general slope to the east and southeast.

2. Notices to affected parties

Under section 21 of AOPA, the NRCB notifies (or directs the applicant to notify) all parties that are “affected” by a registration 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 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 ½ mile (805 m) from the CFO
- all persons who own or reside on land within the greater of ½ mile (805 m) or the minimum distance separation for the land on which the CFO is located

The land zoning on which the CFO is located would require a minimum distance separation of 161 metres. Therefore, the notification distance is ½ mile. (The NRCB refers to this distance as the “affected party radius.”)

A copy of the application was sent to Beaver County, which is the municipality where the CFO is to be located. The proposed CFO is not located within 100 m of the bank of the river, stream or canal.

The NRCB gave notice of the application by public advertisement in the Tofield Mercury as well as the Beaver Chronicle on January 18, 2023. 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, seven letters were sent to people identified by Beaver County as owning or residing on land within the notification distance.

3. Notice to other persons or organizations

Under NRCB policy, 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.

I emailed referral letters and a copy of the complete application to Alberta Health Services (AHS) and Alberta Environment and Protected Areas (EPA).

I also sent a copy of the application to right of ways holders Lamco Gas Co-op Ltd., Alta Gas Services Inc., and Paramount Energy Inc.

I only received a response from EPA. Ms. Laura Partridge, a senior water administration officer with EPA, provided information to the applicant to review their existing water licences to determine if they have enough licensing. The applicant is reminded that they are responsible for obtaining licences under the *Water Act*.

4. Alberta Land Stewardship Act (ALSA) regional plan

Section 22(9) 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 Beaver 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 springs, and common bodies of water
- Has sufficient means to control surface runoff of manure
- Meets AOPA's nutrient management requirements regarding the land application of manure
- Meets AOPA groundwater protection requirements for the design of floors and liners of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 10, the application meets all relevant AOPA requirements. The exemptions that are required to address the AOPA requirements around the water wells' setback are discussed in the following parts of this decision summary.

7. Responses from the 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." Beaver County is an affected party (and directly affected) because the proposed CFO is located within its boundaries.

Ms. Jessica Post, a development officer with Beaver County, provided a written response on behalf of the county. Ms. Post stated that the application is consistent with Beaver County's land use provisions of the municipal development plan (MDP), and that the county has no comments or concerns with the proposal. The application's consistency with Beaver County's MDP is addressed in Appendix A, attached.

Ms. Post's also listed the setbacks required by Beaver County's land use bylaw (LUB). The application meets these setbacks.

Apart from municipalities, an owner or occupant of land within the notification distance may request to be considered "directly affected." The NRCB received one response signed by four individuals. Under our policy, because they are located within the notification distance and have submitted a timely response they are presumed to be directly affected. (See NRCB Operational Policy 2016-7: Approvals, part 6.2)

The directly affected parties raised concerns regarding groundwater protection, short-term manure storage, and spring time surface water run in.

These concerns are addressed in Appendix B.

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 facility. In this case a determination was made, and 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 facility and manure collection area. 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.)

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

9. Exemptions

I determined that the proposed broiler breeder barn is located within the required AOPA setback from water wells. As explained in Appendix C, an exemption to the 100 metre water well setback is warranted due to the construction of the barn with concrete floor, walls, and a roof.

10. Terms and conditions

Registration RA22032 specifies the permitted livestock capacity as 6,000 chicken broiler breeders and permits the construction of a broiler breeder barn.

Registration RA22032 contains terms that the NRCB generally includes in all AOPA registrations, including terms stating that the applicant must follow AOPA requirements and must adhere to the project descriptions in their application and accompanying materials.

In addition to the terms described above, Registration RA22032 includes conditions that address a construction deadline, document submission, and a construction inspection. For an explanation of the reasons for these conditions, see Appendix D.

11. Conclusion

Registration RA22032 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA22032.

March 24, 2023

(Original signed)
Francisco Echegaray
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Concerns raised by directly affected parties
- C. Exemptions from water wells setbacks
- D. Explanation of conditions in Registration RA22032

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may only approve an application for a registration 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 22(2.1) of the act precludes approval officers from considering MDP provisions “respecting tests or conditions related to the construction of or the site” of a CFO or manure storage facility, or regarding the land application of manure. (These types of MDP provisions are commonly referred to as MDP “tests or conditions.”) “Land use provisions” also do not impose procedural requirements on the NRCB. (See NRCB Operational Policy 2016-7: Approvals, part 8.2.5.)

Christopher Horvat’s proposed CFO is located in Beaver County and is therefore subject to that county’s MDP. Beaver County adopted the latest revision to this plan in November 2020, under Bylaw #98-800.

Section 1.0 of the MDP addresses agriculture, generally.

Policy 1.3 clarifies that the “primary use” of this area is for both “extensive and intensive agricultural uses and confined feeding operations”. As a general guiding principle, this is not considered a land use provision, therefore this is not relevant to my decision.

Policy 1.4 states that CFOs or manure storage facilities that “require an approval, registration or authorization under the [AOPA], will not be allowed” on the “south side of Highway #14 and west of Range Road 201, as outlined in Map 11”. This application is not located within this CFO restriction area and therefore this policy does not apply to this CFO.

Policy 1.8 states that the NRCB “have jurisdiction over certain [CFOs] and manure storage facilities in that they require an authorization, registration or approval under [AOPA].” The county’s policy is that “[CFOs] and manure storage facilities must fully satisfy all the requirements and regulations adopted under the Act, specifically the minimum distance separation requirements and the land base requirements.” This application meets the technical and locational requirements of AOPA, therefore, is consistent with this policy.

Policy 1.9 states that in addition to AOPA’s MDS requirements, CFOs “requiring registration or approvals and manure storage facilities requiring authorizations under the Act shall not be allowed within the following areas” as described below in policies 1.9.a-d.

a) within the area described in Policy 1.4 of this Plan,

As mentioned above, Christopher Horvat’s CFO is not located within this CFO restriction area.

b) near the boundaries of a hamlet, village or town as outlined in Maps 3 to 8, inclusive, of this Plan, which areas shall be considered an urban fringe when calculating the regulations approved under [AOPA]. The purposes of siting confined feeding operations near hamlets, villages or towns, the MDS shall be calculated from the boundary of the restricted areas as shown in Map 3 to 8.

Policy 1.9.b appears to refer to the MDS (minimum distance separation) requirements under AOPA. Under NRCB policy, approval officers should not consider MDP provisions that rely on or change the MDS formulas or MDS requirements under AOPA (See also Operational Policy 2016-7: *Approvals*, part 8.2.5.). Christopher Horvat's CFO meets AOPA's required MDS to all neighbouring residences. Therefore, this policy is not applicable to my MDP consistency determination. Additionally, the county's response indicated that they had no concerns regarding the application.

c) near the County's recreational areas as outlined in Maps 9 and 10 of this Plan which areas shall be considered an urban fringe when calculating the regulations approved under the [AOPA]. For purposes of siting [CFO]s near the recreational areas, the MDS shall be calculated from the boundary of the restricted areas as shown in Maps 9 and 10.

Under NRCB policy, approval officers should not consider MDP provisions that rely on or change the MDS formulas or MDS requirements under AOPA (See also Operational Policy 2016-7: *Approvals*, part 8.2.5.). Regardless, Christopher Horvat's CFO is not located within the restricted area. Therefore, this policy has been met.

d) near Beaverhill Lake, as outlined in Map 12 of this Plan, which area shall be considered an urban fringe when calculating the regulations approved under the [AOPA]. For purposes of siting [CFO]s near Beaverhill Lake, the MDS shall be calculated from the boundary of the restricted area as shown in Map 12.

Under NRCB policy, approval officers should not consider MDP provisions that rely on or change the MDS formulas or MDS requirements under AOPA (See also Operational Policy 2016-7: *Approvals*, part 8.2.5.). Regardless, Christopher Horvat's CFO is not within the restricted area. Therefore, this policy has been met.

Policy 1.10 states that CFOs may be granted a reduced setback within the restricted areas provided they "meet a separation distance equivalent to no less than a 99% annoyance-free frequency, as calculated by the Odor from Feedlots Setback Estimation Tool (OFFSET)." This policy is likely not a land use provision because it requires site-specific, discretionary determinations (see Operational Policy 2016-7, *Approvals* 8.2.5). Therefore, this policy is not considered to be relevant to the MDP consistency determination required by section 22(1) of AOPA. At any rate, the proposed CFO exceeds the AOPA's required MDS to all neighboring residences and is not located within a restricted area.

Policy 1.11 states that the county "recognizes its responsibility to effectively manage the road infrastructure...and therefore maintains its right to require that as a condition of the granting of an approval, registration or authorization, the applicant enter into an agreement with the County". NRCB policy is to not include conditions requiring operators to enter into road use agreements, because municipalities have direct authority to manage road use. NRCB Operational Policy 2016-7, *Approvals*, part 8.9. The applicant has been informed of policy 1.11. (The county's response did not specifically request that the NRCB include a road use condition in the applicant's permit.)

Policy 1.12 “consider[s] the minimum distance separation formula in the review of non-farm proposals which are in close proximity to existing [CFO]s”. This is not an applicable policy for my MDP consideration and appears to provide guidance to the county with respect to proposed developments near CFOs.

Policy 1.13 states CFOs “Notwithstanding the establishment of CFO restriction areas as outlined in Policy 1.9 b), c), and d) above, [CFO]s, and seasonal feeding and bedding sites, as defined by [AOPA], that existed on January 1, 2002, may be allowed to expand, but shall be limited to a size not exceeding the maximum number of animals for operations requiring a registration under the Act.”. As stated in policy 1.8, the MDP acknowledges the NRCBs jurisdiction over certain CFOs, therefore I interpret policy 1.13 to relate to the restricted areas identified in policy 1.9. Christopher Horvat’s proposed CFO is not for an expansion. Additionally, the proposed CFO is not located within these restricted areas. My interpretation is also supported by the response Beaver County provided stating that the application is consistent with the MDP.

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

APPENDIX B: Concerns raised by directly affected parties (DAP)

The following individuals qualify for directly affected party status because they submitted a timely 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.)

Clifford Gibelhaus
Kathleen Gibelhaus
Lorraine Gibelhaus
Russell Gibelhaus
N½ 28-50-15 W4M

Concerns from directly affected parties

Christopher Horvat responded to some of the issues raised in the written responses.

The DAPs raised the following concerns which are listed and summarized below, together with my analysis and conclusions, as well as parts of the applicant’s response:

1. **Groundwater quality** – The individuals raised concerns of contamination of the aquifer. They also indicated that the location of the barn and the manure storage do not meet the 100 m setback to water wells.

Applicant’s response

Mr. Horvat responded to the statements of concerns in two letters stating in part that:

... “After some long discussions, on the Gibelhaus families’ concerns, we find the best solution to this concern of theirs is to move the proposed barn location to the south side of the yard.

By doing this, it eliminates the chance of contaminating any runoff water. I would also like to note by doing this there is no water well within 165' of the barn. It is also a better suited location as we will not have to move any utilities before construction can start”...

Approval officer’s conclusions

As noted in the decision summary above, and documented in Technical Document RA22032, the broiler breeder barn meets 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.

There are two water wells within 100 metres of the proposed barn; which is in conflict with section 7(1)(b) of the *Standards and Administration Regulation*. 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 collection area (MCA).

As noted in section 8 of the decision summary, I assessed the CFO's proposed broiler breeder barn, using the NRCB's environmental risk screening tool (ERST), in order to determine the level of risk they pose to groundwater. The proposed barn poses a low potential risk to groundwater.

I also assessed the water wells using a water well exemption screening tool, which help approval officers assess the groundwater risks associated with a nearby water well. The results of the tool suggest that an exemption is likely, and therefore, a determination was made and groundwater monitoring is not required (See Appendix C).

The application does not include a permanent solid manure storage. The application shows one of the proposed locations for a short-term solid manure storage (STMS). Section 5(6) of the Standards and Administration Regulations define the setbacks for the location from a STMS from a common body of water based on the slope of the terrain, and Section 7(1)(b) define the setback of a manure storage facility from a water well. The applicant is aware of all AOPA regulations pertaining manure storages and must follow them (for additional information on STMS see section 3 of this appendix).

Regulations under AOPA set nutrient application limits to prevent the 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.

2. **Surface water (spring time run in/flood)** - The respondents indicated that the site is located in a flood area, as there is runoff every spring flooding the area. The surface water flows east towards the respondents' property on the east. They included photos showing surface water on the land where the barn is proposed.

Applicant's response

Mr. Horvat responded to the statements of concerns in two letters stating in part that:

... "Those pictures were taken 10-13 years ago. When the previous owner green farmed in our yard.

The drainage has been improved. Culverts have been installed. We no longer get that flooding.

I strongly like to note my bale yard is where that flooding used to happen, if flooding was a concern I would not store our hay and straw there.

I would also like to point out when construction starts on the barn, that the site will be completely built up and levelled"...

... "After some long discussions, on the Giebelhaus families' concerns, we find the best solution to this concern of theirs is to move the proposed barn location to the south side of the yard.

By doing this, it eliminates the chance of contaminating any runoff water. I would also like to note by doing this there is no water well within 165' of the barn. It is also a better suited location as we will not have to move any utilities before construction can start”...

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.

CFO operators are required to control run-on and runoff.

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 broiler breeder barn. I also verified these distances by reviewing available air photos. The proposed CFO meets these AOPA setbacks requirements.

As noted in section 8 of the decision summary, I assessed the CFO's proposed broiler breeder barn, using the NRCB's ERST, in order to determine the level of risk it poses to surface water. The barn poses a low risk to surface water.

Section 8(1) of the Standards and Administration Regulation states that the 1:25 year maximum flood level at a manure storage facility or manure collection area must be not less than one metre below any part of the facility where run-on can come into contact with the stored manure.

I consulted the Alberta Government's Flood Portal to determine if the site is located in a flood hazard area. I reviewed the flood hazard, inundation, likelihood, and the flood range maps and I determined that the site is not on a flood risk area.

Incidences of non-compliance can be reported to the NRCB's 24 hour a day toll free reporting line 1-866-383-6722 or 310-0000 (toll free line). NRCB inspectors follow up on all complaints.

3. **Short-Term Solid Manure Storage (STMS)** - The respondents were concerned that using a STMS for not more than 7 months over a three-year period, means that solid manure storage can be used for only 2 1/3 months on an annual basis, which is not viable for the operation. They were also concerned that the manure storage is uncovered posing a risk to the environment in the long term, affecting surface water flowing downstream.

Approval officer's conclusions

Section 5 of the Standards and Administration Regulation specifies that storing solid manure, composting material or compost for a short term is not considered a permanent manure storage facility. AOPA has manure application regulations, and requirements that govern the storage of manure, including short-term solid manure storage. An operation must store solid manure on a “short term” not less than 150 metres from the nearest residence not owned by the operator.

Short term is defined in the regulation as “an accumulated total of not more than 7 months over a period of 3 years”. This means that after storing manure for 7 months in a year, the operator must not store manure at that same location for at least three years. Therefore, the operator must have other short-term solid manure storage at different locations.

The applicant is aware of all AOPA 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.

APPENDIX C: Exemptions from water wells setbacks

The proposed broiler breeder barn is to be located less than 100 m from two water wells. I have confirmed during a site visit that two water wells are located approximately 50 m and 55 m from it. 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 collection area (MCA), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MCA are presumed to be low if the applicant's proposed 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. The distance between the well and the proposed MSF/MCA
- d. 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 8.7.1.

Water well #1 and #2:

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, there is no information on the water wells located approximately 50 m west, and 55 m east, of the proposed barn.

Water well #1 is used for non-domestic purposes. The well appeared to be in good condition at the time of my site inspection and its above ground casing was protected by a shed. The well is cross-gradient of the MCA.

Water well #2 well is used for domestic purposes. The well is located in a pit in the basement of the applicant's residence, and it appeared to be in good condition at the time of my site inspection. The well is cross-gradient of the MCA.

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 likely as seen in Technical Document RA22032.

Based on the above, I am prepared to grant an exemption to the 100 m water well setback requirement for both water wells from the broiler breeder barn.

APPENDIX D: Explanation of conditions in Registration RA22032

Registration RA22032 includes several conditions, discussed below:

a. Construction Deadline

Christopher Horvat proposes to complete construction of the proposed new broiler breeder barn by December 31, 2023, within the same construction season as when the registration is issued. It is my opinion that a longer construction deadline is more reasonable for the proposed scope of work. The deadline of November 30, 2026 is included as a condition in Registration RA22032.

b. Post-construction inspection and review

The NRCB's general practice is to include conditions in new or amended permits to ensure that the new or expanded facilities are constructed according to the required design specifications. Accordingly, Registration RA22032 includes conditions requiring the concrete used to construct the liner of the manure collection and storage portion of the broiler breeder barn to meet the specification for category D (solid manure – dry) in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas." Christopher Horvat shall provide evidence or written confirmation from a qualified third party that the concrete used for the manure collection and storage area meets the required specifications.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, and to reduce risk to the operator, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Registration RA22032 includes a condition stating that Christopher Horvat shall not place livestock or manure in the manure storage or collection portions of the new broiler breeder barn until NRCB personnel have inspected the facility and confirmed in writing that it meets the registration requirements.