

Decision Summary RA05035A

This document summarizes my reasons for issuing Registration RA05035A under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA05035A. All decision documents and the full application are available on the Natural Resources Conservation Board (NRCB) website at www.nrcb.ca under Confined Feeding Operations (CFO)/CFO Search. My decision is based on the act and its regulations, the policies of the NRCB, the information contained in the application, and all other materials in the application file.

1. Background

On August 30, 2005, the NRCB issued Registration RA05035 to Craigievar Farm Ltd., which permitted the expansion to an existing hog barn, and a renovation to the barn floor and pits. The application also included a change within animal category, from farrow to finish to feeder hogs. The NRCB included two groundwater monitoring conditions as part of that registration.

On April 29, 2020, Craigievar Farm Ltd. submitted a Part 1 application to the NRCB to amend the two monitoring conditions. The monitoring conditions are both designed to assess groundwater, although in different ways; one uses a leakage detection system around the earthen manure storage, while the other involves testing of water wells within 100 metres of the CFO facilities. The applicant proposed to suspend or reduce the frequency of monitoring tests on the basis that, for 15 years, to their knowledge, the reports have been within the necessary parameters. On October 8, 2020, I deemed the application complete.

The NRCB currently has a practice in which groundwater monitoring conditions are placed in a separate "monitoring statement". The monitoring statement allows more flexibility in administering monitoring conditions to respond to monitoring data, without requiring amendments to permits. Therefore, I considered the amendment as a change from "inflexible" monitoring conditions, to flexible monitoring conditions with associated monitoring statements.

There is no proposed change in permitted livestock numbers.

Under AOPA, this type of application requires an amendment to a registration.

a. Location

The CFO is located at SE 16-40-25 W4M in Lacombe County, roughly 7 km southwest of the Village of Clive, and is adjacent to Highway 815. The terrain is undulating and the site slopes down to the southeast. A seasonal creek exists roughly 300 metres south of the site.

2. Notices to affected parties

Under section 21(1) of AOPA, the approval officer must notify all "affected parties" of a registration application. Section 5 of AOPA's Part 2 Matters Regulation lists the categories of municipalities that are affected parties. These categories include the municipality where the existing CFO is located. Lacombe County is an affected party under the Part 2 Matters Regulation, because the CFO is located within its boundaries.

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

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

Under section 21(2) of the act, affected municipalities are automatically also considered "directly affected" parties. Under section 21(3), all owners or occupiers of land who are affected parties may apply for a determination as to whether they are directly affected parties. However, under NRCB policy, all affected parties are presumed to be directly affected, if they submit a written response to the notice within the prescribed timeline. See NRCB Operational Policy 2016-7: *Approvals*, part 6.2.

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

The NRCB published notice of the application in the Lacombe Express on October 8, 2020 and posted the full application on the NRCB website for public viewing. The NRCB also emailed referral letters and a copy of the complete application to Lacombe County, Alberta Health Services (AHS), and Alberta Environment and Parks (EP). Nine courtesy letters were sent to people identified by Lacombe County as owning or residing on land within the affected party radius.

3. Responses from the municipality, referral agencies, and directly affected parties

Ms. Allison Noonan, an administrative assistant with Lacombe County, provided a written response on behalf of Lacombe County. As noted in section 2, Lacombe County is a directly affected party.

Ms. Noonan stated that the application is consistent with Lacombe County's municipal development plan. She stated that the site is zoned as agricultural land, as is the surrounding lands. She stated that the land is not subject to any area structure plans, or intermunicipal development plans. She concluded that Lacombe County has no objections to the application.

The application's consistency with Lacombe County's MDP is addressed in appendix A, attached.

Ms. Pamela Kutuadu, a public health inspector, provided a written response on behalf of AHS. Ms. Kutuadu stated that their office has no objection to the application. She further added general comments on water well maintenance, and the public health act. A copy of her response was forwarded on to the applicant.

Ms. Laura Partridge, a water administration officer, provided a written response on behalf of EP. Ms. Partridge stated that if there will be an increase in water requirements, a new water well will need to be constructed, and additional water licensing obtained. She stated that the water well testing condition currently on the permit does not impact the current water well licensing.

No other responses were received from other groups or individuals.

4. Environmental risk screening of existing and proposed facilities

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

All of the CFO's existing and proposed facilities pose a low potential risk to groundwater and surface water, with the exception of the EMS scoring a moderate risk to surface water (The CFO's existing facilities are listed in the appendix to RA05035A). Based on that moderate potential risk result, I conducted a second site visit to further assess the likelihood that run off from the EMS could impact surface water.

My observations from the site visit found that the natural slope of the site would direct run off to the south-southeast direction, whereas the seasonal creek is directly south. This would increase the distance the runoff would have to travel in order to enter the seasonal creek. The path between the EMS and the seasonal creek intersects with a county gravel road. The road provides a significant berm-like function that would further limit the likelihood of manure reaching the seasonal water body. I did not observe any culverts under the road that would connect surface water flow between the two quarters. Given the nature of the site, I conclude that the risk to surface water is adequately addressed.

5. Other factors considered

The previous application RA05035 met all relevant AOPA requirements. The proposed issuance of two monitoring statements has no impact on that determination, which still stands.

The proposed application relates to changes in monitoring conditions and frequency. As such, I consulted the NRCB's Monitoring Review Team (MRT). The results of the MRT is listed in Appendix B, attached.

Due to the length of time between RA05035 and RA05035A, I reassessed the site's consistency with Lacombe County's MDP (see Appendix A, attached). It is important to note, however, that monitoring conditions are not considered part of an MDP consistency analysis under section 22(2.1) of AOPA.

6. Terms and conditions

Rather than issuing a separate "amendment" to Registration RA05035, I am issuing a new Registration (RA05035A) with the required amendment. Registration RA05035A therefore contains all of the terms and conditions in RA05035A, with the exception of the monitoring requirements, which are now in the issued monitoring statements "Leak Detection Monitoring Statement" and "Water Well Monitoring Statement". Construction conditions that are met have been moved to an appendix of Registration RA05035A.

7. Conclusion

Registration RA05035A is issued for the reasons provided above, in the attached appendices, and in Technical Document RA05035A.

Registration RA05035 is therefore cancelled, unless Registration RA05035A is held invalid following a review and decision by the NRCB's board members or by a court, in which case the previous permit will remain in effect.

January 27, 2021

(Original Signed) Lynn Stone Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Monitoring Review Team
- C. Explanation of conditions in Registration RA05035A

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may approve an application for a registration only if the approval officer finds that the application is consistent with the "land use provisions" of the applicable municipal development plan (MDP).

The NRCB interprets the term "land use provisions" as covering MDP policies that provide generic directions about the acceptability of various land uses in specific areas and that do not call for discretionary judgements relating to the acceptability of a given confined feeding operation (CFO) development. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.2.5.) Under this interpretation, the term "land use provisions" also excludes MDP policies that impose procedural requirements. In addition, section 22(2.1) of the act precludes approval officers from considering MDP provisions "respecting tests or conditions related to the construction of or the site" of a CFO or manure storage facility, or regarding the land application of manure. (These types of MDP provisions are commonly referred to as MDP "tests or conditions.")

Craigievar Farm Ltd.'s CFO is located in Lacombe County and is therefore subject to that county's MDP. Lacombe County adopted the latest revision to this plan on July 9, 2020, under Bylaw #1238/17.

Sections 3.9 of the MDP relate to CFOs. Under section 3.9.1(a), the MDP prohibits "new" CFOs within 1.6 km (one mile) from several areas listed in that section.

Craigievar Farm Ltd.'s CFO is an existing CFO, and therefore it is not subject to these setbacks. Irrespective, the CFO is outside of these 1.6 km setbacks.

Additionally, section 3.9.1 states that "further restrictions on the development of confined feeding operations may apply as directed by an Intermunicipal Development Plan or other local plans approved by Council." No intermunicipal or local plans apply to Craigievar Farm Ltd.'s CFO.

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

In my view, under sections 1.3.4 and 3.3, the MDP clearly intends to incorporate Lacombe County's Land Use Bylaw (LUB) #1237/17 (see NRCB Operational Policy 2016-7: Approvals, part 8.2.3). Accordingly, I considered the LUB. Under that bylaw, the subject land is currently zoned as Agricultural "A" District. CFOs are not listed as either a permitted or discretionary use within that zoning category. However, section 3.2(2)(j) of the LUB states that CFOs do not require a development permit. I interpret this provision as meaning either that the county intended CFOs to have the same effective status as listed permitted uses, or that the county simply does not intend to address CFOs in its LUB (given that the NRCB's permitting role since AOPA came into effect in 2002). In its response to this application, the county stated that the CFO is a permitted use, which is consistent with the first of these two interpretations. Under either interpretation, the CFO is not inconsistent with the LUB.

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

APPENDIX B: Monitoring Review Team

In application RA05035A, Craigievar Farm Ltd., requested that the two ongoing groundwater monitoring condition requirements be reviewed.

The two monitoring conditions are both designed to assess groundwater. One uses a leak detection system around the earthen manure storage, while the other involves testing of water wells within 100 metres of the CFO facilities. The applicant proposed to suspend or reduce the frequency of monitoring tests on the basis that, for 15 years, to their knowledge, the reports have been within the necessary parameters.

The NRCB has a technical team known as the Monitoring Review Team (MRT). The MRT is comprised of staff from the NRCB, including the Senior Environmental Technical Specialist. The MRT's mandate is to review CFO facilities, as well as risk assessment, leak detection and water well monitoring results, other site specific information, upon request from an approval officer or inspector. The MRT recommends follow-up action including the frequency and scope of monitoring requirements. Given the nature of application RA05035A, I referred the file to the MRT.

The MRT met in October of 2020, and reviewed the following documents relating to Craigievar Farm Ltd.:

- 2020 ERST results
- EMS geotechnical engineering report
- Water well screening tool results
- 2020 water well analysis results for ID# 274025 and ID#2094324
- Water well reconnaissance report
- 2019 water well monitoring review report
- Groundwater monitoring results (2005-2020)
- EM Survey summary results (2013 and 2014)

Based upon the results of this review, the MRT recommended that:

- Leak detection and water well monitoring conditions are amended to become flexible so that monitoring requirements can be amended based on results from monitoring activities
- Leak detection monitoring frequency be reduced from every year to every 2 years, analyzing for indicator parameters
- Water well monitoring frequency remain annual, analyzing for chloride, nitrate-N, and E coli
- Monitoring results be reviewed in the future to determine if monitoring requirements should be amended

In response to application RA05035A and the MRT's recommendations, I have accepted the recommendations of the MRT and amended the two monitoring conditions to become flexible, and issued a Leak Detection Monitoring Statement and a Water Well Monitoring Statement to reflect the recommended monitoring requirements.

APPENDIX C: Explanation of conditions of Registration RA05035A

In keeping with current NRCB practices in monitoring conditions, the previous "inflexible" conditions in Registration RA05035 have been replaced with "flexible" conditions in Registration RA05035A. Two monitoring documents, "Leak Detection Monitoring Statement", and "Water Well Monitoring Statement", have also been issued to further define the monitoring requirements.

Ongoing Condition #7b of Registration RA05035 read as:

"A Comprehensive report must be done before any animals are allowed to enter the barn and an Indicator report must be done every 12 months thereafter. The Comprehensive/Indicator reports must include laboratory analysis of the parameters outlined in the latest version of the NRCB technical guideline "Leak Detection and CFOs".

This condition has been updated in Registration RA05035A to the following:

"The owner/operator shall conduct leak detection monitoring for the liquid manure storage facility as prescribed and authorized in writing, and as amended from time to time where appropriate, by the NRCB."

Ongoing Condition #8a of Registration RA05035 read as:

"Drinking water quality tests including bacteriological and chemical factors must be conducted annually on the water wells located closer than 100 metres to the CFO facilities, with the results submitted annually to the NRCB by June 30 each year beginning in 2006."

This condition has been updated in Registration RA05035A to the following:

"The permit holder shall sample and test raw groundwater, from water wells and in accordance with monitoring requirements, as prescribed by the NRCB in writing. The NRCB may, based on the monitoring results and at its discretion, revise those requirements from time to time, in writing."