

Decision Summary RA20033

This document summarizes my reasons for issuing Authorization RA20033 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA20033. 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 June 11, 2020, Scova Farms Ltd. submitted a Part 1 application to the NRCB to remove a dividing wall between two existing liquid manure storages to create a single liquid manure storage (108.8 metres x 112.8 metres x 5.5 metres deep) at an existing dairy CFO. The Part 2 application was submitted on June 12, 2020. On June 16, 2020, I deemed the application complete.

The purpose of the proposed modification of the liquid manure storage is to better manage the manure produced at the operation, by storing and agitating the manure in a single liquid manure storage, instead of two of them.

There is no proposed increase in livestock.

Under AOPA, this type of application requires an authorization. (This is one of several types of “permits” issued under AOPA. For an explanation of the different types and when each one applies, see www.nrcb.ca.)

a. Location

The existing CFO is located at NE 9-42-25 W4 in Ponoka County, roughly 7 km southeast of the Town of Ponoka. The terrain is undulating with a general slope to the south and southwest.

b. Existing permitted facilities

The CFO is currently permitted under NRCB Approval RA16073. This approval allows the construction and operation of a dairy CFO with 800 milking cows (plus associated dries and replacements). The CFO’s existing permitted facilities are listed in Approval RA16073.

2. Notices to affected parties

Under section 21 of AOPA, notice of an authorization application must be provided to municipalities that are “affected” by the 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. Under section 21(2) of the act, all affected municipalities are automatically also “directly affected” parties. The NRCB interprets section 21(3) as allowing affected municipalities to provide written submissions regarding whether the application meets the requirements of the regulations under the act. (See Operational Policy 2016-7: *Approvals*, part 7.11.2.)

Ponoka County is both an affected and directly affected party because the proposed expansion is located within its boundaries.

On June 16, 2020, the NRCB emailed referral letters and a copy of the application to Ponoka County, Alberta Health Services (AHS), Alberta Environment and Parks (AEP), and Alberta Agriculture and Forestry (AF).

3. Responses from the municipality and referral agencies

I received responses from the county, AEP and AF. No response was received from AHS.

Mr. Tom Webber, the assistant chief administrative officer with Ponoka County, provided a verbal response on behalf of the county. As noted in section 2, Ponoka County is a directly affected party.

In his response, the assistant chief administrative officer indicated that he has no issues or concerns with the proposal. The application's consistency with the county's municipal development plan (MDP) is addressed in Appendix A, attached.

An AF inspector indicated that AF has no concerns with the application.

A water administrator technologist at AEP sent an email to the applicant and the NRCB, indicating that no additional water licensing is required for this operation.

4. Environmental risk screening of existing and proposed facilities

When reviewing a new authorization application for an existing CFO, NRCB approval officers normally assess the CFO's existing buildings, structures, and other facilities, using the NRCB's environmental risk screening tool to determine the level of risk they pose to surface water and groundwater. This 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.) 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 done with a previous version of the risk screening tool and requires updating. See NRCB Operational Policy 2016-7: *Approvals*, part 8.13.

In this case, the risks posed by Scova Farms' existing CFO facilities were assessed in 2016. According to that assessment, the facilities posed a low risk to surface water and groundwater.

The circumstances have not changed since that assessment was done. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

I also assessed the proposed converted liquid manure storage, using the NRCB's risk screening tool, and determined that it poses a low risk to groundwater and surface water.

5. Other factors considered

The application meets all relevant AOPA requirements, with the terms and conditions summarized in part 6.

In addition, the proposed modification is consistent with the land use provisions of Ponoka

County's municipal development plan and with its land use bylaw. (See Appendix A for a more detailed discussion of the county's planning requirements.)

With respect to the act's technical requirements, the proposed modification:

- Meets the required AOPA setbacks from all nearby residences, with one exception (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS) with an exemption under Section 3(5)(c) of the Standard and Administration Regulation
- 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 groundwater protection requirements for the design of floors and liners of manure storage facilities

6. Terms and conditions

Authorization RA20033 permits the removal of a dividing wall within two existing liquid manure storages, creating a single one.

Authorization RA20033 also contains terms that the NRCB generally includes in all AOPA authorizations, 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, Authorization RA20033 includes conditions that:

- Set a deadline of November 30, 2021 for the approved construction to be completed
- Require submission of an engineer's completion report
- Prohibit Scova Farms from placing manure in the modified part of the existing liquid manure storages until the modified area has been inspected by the NRCB following its construction

For an explanation of the reasons for these conditions, see Appendix B.

7. Conclusion

Authorization RA20033 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA20033.

Authorization RA20033 should be read in conjunction with previously issued Approval RA16073, which remains in effect.

September 10, 2020

(Original Signed)
Francisco Echeagaray, P.Ag.
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization RA20033

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may approve an application for an authorization 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 10.2.5) 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.”)

Scova Farms’ CFO is located in Ponoka County and is therefore subject to that county’s MDP. Ponoka County adopted the latest revision to this plan on October 2018, under Bylaw #6-08 MDP.

Sections 2.1 to 2.8 of the MDP deal with CFOs. I have reviewed these sections, and find that these provisions generally apply to new or expanded CFOs. The MDP does not define “expansion,” so I will use the definition in the Part 2 Matters Regulation under AOPA. Section 1(1)(d)(i) of that regulation defines an “expansion” as the construction of additional facilities to confine more livestock. Scova Farms’ application does not involve confining more livestock, so I conclude that it is not an “expansion” under this definition. Therefore, the MDP policies relating to CFO “expansions” do not apply to Scova Farms’ application. Irrespective, the application meets the policies for expanded CFOs.

For these reasons, I conclude that the application is consistent with the land use provisions of Ponoka County’s MDP. This conclusion is supported by the county’s non-objection to the application.

In my view, under sections 1.4, 1.6, 4.10, 17.5 and in Appendix A, the MDP clearly intends to incorporate Ponoka County’s Land Use Bylaw (LUB) # 7-08. (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. CFOs are listed as a permitted land use within this land use zoning, provided that they hold the required authorization (or permit) under AOPA. As noted in part 1 of this decision summary, Scova Farms’ CFO has been permitted by the NRCB under Approval RA16073.

APPENDIX B: Explanation of conditions in Authorization RA20033

Authorization RA20033 includes several conditions, discussed below:

a. Groundwater protection requirements

Scova Farms proposes to remove a dividing wall between two existing liquid manure storages, and construct a one metre thick compacted soil liner in place of the existing dividing wall. Section 9 of AOPA's Standards and Administration Regulation specifies a maximum hydraulic conductivity for this type of liner in order to minimize leakage.

To demonstrate compliance with this standard, Scova Farms provided lab measurements of the hydraulic conductivity of the materials that will be used to construct the compacted soil liner. Lab measurements of hydraulic conductivity are made in a precisely controlled setting and are typically based on a small soil sample. Therefore, the NRCB generally multiplies lab-measured hydraulic conductivity values by a factor of 10 to reflect the potential variability in actual liner materials and conditions that can reasonably be expected to be achieved in the field.

Example: Hydraulic conductivity = k
 Lab k = 1×10^{-9} cm/sec
 Expected field k = $10 \times (1 \times 10^{-9}$ cm/sec) = 1×10^{-8} cm/sec

The regulations provide that the actual hydraulic conductivity of a one metre thick compacted soil liner must not be more than 1×10^{-7} cm/sec.

In this case, the lab measurement was 6.04×10^{-9} cm/sec. With the required ten-fold modification, the expected field value is 6.04×10^{-8} cm/sec. This expected value is below the maximum value in the regulations. Therefore, the proposed liner meets the hydraulic conductivity requirement in the regulations.

To provide additional assurance that the as-built EMS adequately protects groundwater, Authorization RA20033 includes a condition requiring Scova Farms to provide an engineer's completion report certifying that the liner under the previous dividing wall was constructed with the same liner material as that used for hydraulic conductivity testing and that the liner was constructed according to the proposed procedures and design specifications.

b. Construction Deadline

Scova Farms proposes to complete the removal of the dividing wall by December 31, 2020, within the same construction season when this authorization is issued. In my opinion, a construction schedule that allows more than one construction seasons is more practical and realistic for the proposed development. Therefore, Authorization RA20033 includes a condition stating a deadline of November 30, 2021.

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, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Authorization RA20033 includes a condition stating that Scova Farms shall not place manure in the modified manure storage portions of the liquid manure storage until NRCB personnel have inspected it and confirmed in writing that it meets the authorization requirements.