

Decision Summary RA24003A

This document summarizes my reasons for issuing Authorization RA24003A under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Documents RA24003 and RA24003A. 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 amendment to an authorization. For additional information on NRCB permits please refer to www.nrcb.ca.

1. Background

On April 10, 2024, the NRCB issued Authorization RA24003 to Bart and Karly Boom operating as Boom Holsteins Ltd. (Boom Holsteins), to construct a free stall dairy barn (120 m x 33 m) and a sand recovery storage shed (60 m x 21 m) at an existing dairy confined feeding operation (CFO).

On January 8, 2025, Boom Holsteins applied to amend Authorization RA24003, to modify the location of the sand recovery storage to be inside the existing (old) dairy barn (see Technical Document (TD) RA24003A), instead of building a separate sand recovery storage shed. Additionally, the application included construction of a liquid manure pit inside the existing (old) dairy barn to collect water and manure from the sand. No other changes were proposed.

The application for amendment was submitted on January 8th, 2025. On January 9th, 2025, I deemed the application complete.

a. Location

The existing CFO is located at SE 13-32-28 W4M in Mountain View County, roughly 17 km southeast of Olds, Alberta. The terrain is gently undulating with a general slope to the southwest towards an un-named slough/reservoir located approximately 680 m from the CFO.

2. Notices to affected parties

Under section 21 of AOPA, the NRCB notifies all parties that are “affected” by an authorization application. Section 5 of AOPA’s Part 2 Matters Regulation defines “affected parties” as:

- the municipality where the CFO is located or is to be located
- 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
- any other municipality whose boundary is within a notification distance. In this case, the notification distance is ½ mile (804 m) from the CFO

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 Mountain View County, which is the municipality where the CFO is located.

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.

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

I also sent a copy of the amendment application to Crossroads Gas Co-op Ltd. and Ember Resources Inc. as right of way/easement holders.

No responses were received from the above-listed organizations.

4. Municipal Development Plan (MDP) consistency

In Decision Summary RA24003, I determined that the proposed construction of the sand recovery storage with associated manure collection pit was consistent with the land use provisions of Mountain View County's municipal development plan (MDP). No changes have been made to the MDP since Authorization RA24003 was issued. The proposed new location of the sand recovery storage with associated manure collection pit has no effect on this determination. Therefore, the previous assessment of the application's consistency with the MDP is still valid, and additional analysis is not required.

5. AOPA requirements

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

- 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 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 9, the application meets all relevant AOPA requirements.

6. Response from municipality

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.

Municipalities that are affected parties are identified by the Act as "directly affected." Mountain View County is an affected party (and directly affected) because the proposed facility is located within its boundaries.

Ms. Peggy Grochmal, a permitting and development officer with Mountain View County/Planning and Development Services, provided a written response stating that the application is consistent with Mountain View County's land use provisions of the municipal development plan (MDP). The application's consistency with Mountain View County's MDP was addressed in Appendix A of Decision Summary RA24003.

Ms. Grochmal also listed the setbacks required by Mountain View County's land use bylaw (LUB) and noted that the application meets these setbacks.

7. Environmental risk of facilities

New CFO facilities which clearly meet or exceed AOPA requirements may be assumed to pose a low risk to surface and groundwater. There may be circumstances where, because of the proximity of a shallow aquifer, porous subsurface materials, or surface water systems, an approval officer may require groundwater or surface water monitoring for the facility. In this case a determination was made that those circumstances are not present, and monitoring is not required.

When reviewing an application to amend an authorization 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 Boom Holsteins' existing CFO facilities were assessed in 2013, 2015, 2018 and 2024 using the ERST. According to those assessments, the facilities pose a low potential risk to surface water and groundwater.

The circumstances have not changed since the assessments were done. The proposed change in location of the sand recovery storage with associated manure pit does not have an effect on the risk assessment. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

8. Exemptions

I determined that the proposed new location of the sand recovery storage with associated manure pit is located within the required AOPA setback from 2 water wells. As explained in Appendix A, an exemption to the 100 m water well setback is warranted due to construction and location upslope from the proposed sand recovery storage with associated manure pit.

9. Terms and conditions

Rather than issuing a separate "amendment" to Authorization RA24003, I am issuing a new authorization (RA24003A) with the required amendment. Authorization RA24003A therefore contains all of the terms and conditions in RA24003, but with modifications in regard to the

placement of the sand recovery area with associated manure pit inside the old dairy barn, and the removal of the sand recovery storage shed as a facility.

10. Conclusion

Authorization RA24003A is issued for the reasons provided above, in Decision Summaries RA24003 and RA24003A, and in Technical Documents RA24003 and RA24003A. In the case of a conflict between these documents, the latest ones will take precedence.

Authorization RA24003 is therefore superseded, unless Authorization RA24003A 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. This authorization must be read in conjunction with NRCB previously issued Approval RA15059A and Authorization RA18041, which remain in effect.

January 30, 2025

(Original signed)
Sarah Neff
Approval Officer

Appendices:

A. Exemptions from water well setbacks

APPENDIX A: Exemptions from water well setbacks

1. Water Well Considerations

The proposed sand recovery storage with associated manure pit is to be located less than 100 m from two water wells. I have confirmed that the water wells are located approximately 18 m and 75 m from the proposed facility during a site visit and through aerial photography. 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 wells:

- 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 9.10.2.

The first 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 18 m east of the proposed sand recovery storage with associated manure pit is likely EPA water well ID # 1035008. This well is reported to have been installed in 2003 and has a perforated or screened zone from 24.38 m to 36.58 m below ground level across stratigraphy. This well has an above ground casing. This well is used for domestic and non-domestic purposes. The well's log identifies protective layer or layers from 5.79 m to 12.8 m below ground level. The well has a driven seal from ground surface to 18.29 m below ground level. The well appeared to be in good condition at the time of my site inspection and is protected by a cement barrier and 4 steel posts surrounding the well. The well is up-gradient of the CFO and MSF/MCA.

The second 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 75 m east of the proposed sand recovery storage with associated manure pit is likely EPA

water well ID # 1245129. This well is reported to have been installed in 2002 and has an unknown perforated or screened zone. This well has an above ground casing. This well is used for domestic and non-domestic purposes. The well's log identifies protective layer or layers from 5.18 m to 39.01 m below ground level. The well has a driven and bentonite seal from ground surface to 39.93 m below ground level. The well appeared to be in good condition at the time of my site inspection and is protected inside a fully enclosed shed. The well is up-gradient of the CFO and MSF/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

In this case, the results of the water well exemption screening tool suggest that an exemption is likely as seen in Technical Document RA24003A.

Under the regulation, an approval officer may require a groundwater monitoring program of the water wells in question. In my view, given meeting AOPA technical requirements and upslope nature of the wells, monitoring is not required.

Based on the above, I am prepared to grant an exemption to the 100 m water well setback requirement for the proposed sand recovery storage with associated manure pit.

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