

Decision Summary RA24023

This document summarizes my reasons for issuing Authorization RA24023 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24023. All decision documents and the full application are available on the Natural Resources Conservation Board (NRCB) website at <u>www.nrcb.ca</u> 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 authorization. For additional information on NRCB permits please refer to <u>www.nrcb.ca</u>.

1. Background

On April 30, 2024, two NRCB inspectors completed a site visit at the CFO as part of the livestock population verification program. The inspectors found that two feedlot pens were constructed in 2021, without a permit. This is considered unauthorized construction. As a result, Compliance Directive 24-01 was issued on May 10, 2024, requiring that the CFO owner either permit these pens, or decommission them. As one of the pens (pen 12) has since been decommissioned, this application seeks to permit the remaining unauthorized pen to ensure the CFO's compliance with AOPA is maintained.

On May 21, 2024, Cecil and Marjorie Klassen operating as Beaver Valley Cattle Co. Ltd. (Klassen) submitted a Part 1 application to the NRCB to permit a previously constructed (unauthorized) manure collection area (MCA)/manure storage facility (MSF) at an existing beef CFO. The MCA/MSF consists of a feedlot pen.

The Part 2 application was submitted on June 4, 2024. On July 11, 2024, I deemed the application complete.

The application involves:

• Permitting the existing west livestock pen (pen 11) – 304.8 m x 45.7 m (1000 ft. x 150 ft.)

The applicant also included in the application the rebuilding of the protective berm along the north end of the CFO. The berm has since been rebuilt and has been managed by the compliance division.

a. Location

The existing CFO is located at SE 25-30-26 W4M in Kneehill County, roughly 1.6 km west of Linden, AB. Three Hills Creek meanders to the northeast, parallel to the existing feedlot pens at approximately 125 metres. The terrain is relatively flat but has a steep slope towards the Three Hills Creek.

b. Existing permits

The CFO is already permitted under Approval RA06036.

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 1.5 miles (2,414 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 Kneehill 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.

Referral letters and a copy of the complete application were emailed to Alberta Environment and Protected Areas (EPA) and Alberta Transportation and Economic Corridors (TEC).

I also sent a copy of the application to Harvest Hills Gas Co-op Ltd. and Ember Resources Inc. and they are right of way holders.

I did not receive any responses.

4. Municipal Development Plan (MDP) consistency

I have determined that the unauthorized feedlot pen is consistent with the land use provisions of Kneehill County's municipal development plan. (See Appendix A for a more detailed discussion of the County's planning requirements.)

5. AOPA requirements

With respect to the technical requirements set out in the regulations, the previously constructed but not yet permitted feedlot pen:

- 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 protective layers of manure collection areas

With the terms summarized in part 9, the application meets all relevant AOPA requirements. The variance that is required to address the AOPA requirements around water well setbacks is discussed in section 8 and Appendix B of this decision summary.

6. Responses 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." Kneehill County is an affected party (and directly affected) because the existing CFO is located within its boundaries.

Ms. Barb Hazelton, the manager of planning and development with Kneehill County, provided a written response on behalf of Kneehill County. Ms. Hazelton stated that the application is consistent with Kneehill County's land use provisions of the municipal development plan. The application's consistency with Kneehill County's municipal development plan is addressed in Appendix A, attached.

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

7. Environmental risk of facilities

New MCA/MSF 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 monitoring or an exemption for the facility. In this case, a determination was made, and groundwater monitoring is required due to the proximity of the MCA/MSF to a water well, and lack of available information regarding the water well construction.

As part of my review of this application, I assessed the risk to the environment posed by the CFO's existing manure storage facilities and manure collection areas. 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 9.17). 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 <u>www.nrcb.ca</u>.)

For the sake of efficiency, I first assessed the CFO's existing catch basin using the ERST. This appears to be the CFO's highest risk facility because it is used to store manure impacted runoff. The assessment found that this facility poses a low potential risk to groundwater and surface water. Because this is the CFO's highest risk facility, I presume that the CFO's other existing facilities also pose a low potential risk to both groundwater and surface water. From a review of other information gathered in the course of this application, I am satisfied that the screening provided by the ERST is adequate and that the presumption is not rebutted. A further assessment of the risks posed by these other facilities, using the ERST, is not necessary.

8. Variances

The applicant applied for a variance of the requirement for a water well to be at least 100 m away from a MCA/MSF. I determined that the existing west pen, which was constructed without a permit, is located within the required AOPA setback from an existing water well (well ID #135287). As explained in Appendix B, I am prepared to issue a variance to the 100 m water

well setback due to regular maintenance and adequate protection of the well. A water well monitoring condition will also be required in the permit to address the proximity of the well to the MCA/MSF and lack of available information regarding well construction (see Appendices B and C, below).

9. Terms and conditions

Authorization RA24023 permits the previously constructed west feedlot pen.

Authorization RA24023 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 RA24023 includes a condition that addresses monitoring. For an explanation of the reasons for this condition, see Appendix C.

10. Conclusion

Authorization RA24023 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24023.

Authorization RA24023 must be read in conjunction with Klassen's previously issued Approval RA06036 which remains in effect.

November 4, 2024

(Original signed) Sarah Neff Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Variances
- C. Explanation of conditions in Authorization RA24023

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may only approve an application for an authorization or amendment of an authorization 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.

"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 9.2.7.)

Klassen's CFO is located in Kneehill County and is therefore subject to that county's MDP. Kneehill County adopted the latest revision to this plan on February 23, 2021, under Bylaw No.1829.

As relevant here:

Policy 11 of the MDP under Agriculture, states that "no new or expansions of existing confined feeding operations (CFOs) will be allowed in the following:

- (i) In hazard lands or environmentally sensitive lands as defined by the province and the 2010 Summit Report,
- (ii) Within 1.6 kilometres (1 mile) of any hamlet or grouped Country Residential development, or
- (iii) Within 1.6 kilometres (1 mile) of an urban fringe area or an Intermunicipal Development Plan boundary"

Klassen's CFO is not located within any of these setbacks or exclusion zones.

For this reason, I conclude that the application is consistent with the land use provisions of Kneehill County's MDP that I may consider.

APPENDIX B: Variances

Because the MSF/MCA has already been constructed (unauthorized), an exemption under section 7(2) of the SAR is not available.

The existing west pen is located less than 100 m from a water well. I have confirmed that one water well is located approximately 11 m from it during a site visit and via aerial photography. This is in conflict with the section 7(1)(b) of the Standards and Administration Regulation (SAR).

Approval officers must not grant variances lightly or in the absence of substantive evidence they will produce equivalent levels of protection (see Decision 03-04, *AAA Cattle Ltd.* p 24). I will consider whether a variance is warranted to the water well for the west pen below.

Existing west pen:

1. Water Well Considerations

On October 18, 2024, the CFO operator requested a variance to the water well setback requirement on the grounds that the water well is located inside an insulated, heated and fully enclosed shed and is maintained on a regular basis.

In this case, the facility has already been constructed (without a permit) but may cause a risk to the environment. I therefore need to either deny the application or alternatively consider if a variance is warranted under AOPA's section 17(1). It is my opinion that considering a variance is appropriate in this case.

I have used the same tools that I would normally use to determine if an exemption is warranted. I consider the water well exemption framework as useful for assessing the degree of protection for the water well in relation to a manure collection area (MCA)/manure storage facility (MSF). In this case, I presume that the risks of direct aquifer contamination from the MCA/MSF are low if the MCA/MSF meets (or otherwise meets) AOPA's technical requirements to control runoff and leakage. However, when determining whether a MCA/MSF that otherwise meets AOPA's technical requirements provides the same or greater protection and safety as provided for by the regulations, I also assess whether water wells themselves could act as conduits for aquifer contamination.

Water well ID 135287:

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located approximately 11 m northeast of the west pen is likely EPA water well ID #135287. There is no available information as to what year the well was drilled, nor what depth the perforated or screened zone exists below ground level across stratigraphy. The well has an above ground casing and is protected by a fully enclosed shed. I note that in my conversations with the applicant, the water well is used presently for domestic and non-domestic purposes. The well's log identifies a protective layer from ground surface to 37 m below ground level. The well has a driven seal, but no information on the depth in which it was placed. The well appeared to be in good condition at the time of my site inspection and its casing was protected by a welded steel cage. The well is up-gradient of the CFO and 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

well¹. This tool is useful in gauging the level of protection of groundwater because we use the tool to determine if a water well is going to be impacted when an exemption is considered.

In the case of water well ID 135287, the results of the water well exemption screening tool suggest that an exemption would be likely as seen in page 8 of the Technical Document RA24023.

One mechanism that may provide the same or greater protection and safety is if the approval officer implements a groundwater monitoring program of the water well in question. A condition has been added to Authorization RA24023 requiring water well monitoring to water well ID 135287, due to the proximity of the well to the existing west pen, as well as the lack of information regarding well construction. Therefore, in my opinion, a variance of the 100 m setback requirement for the existing west pen is appropriate for this water well (see Appendix C).

Based on the above, I am prepared to grant a variance to the 100 m water well setback requirement for the existing west pen.

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

APPENDIX C: Explanation of conditions in Authorization RA24023

Authorization RA24023 includes one condition, discussed below:

a. Water well monitoring and protection

As noted in Decision Summary RA24023 and Technical Document RA24023, the Water Well Exemption Screening Tool scores indicated an exemption is likely. However, due to the proximity of the water well to the existing west pen, as well as the limited available information on the well construction, a condition will be included in Authorization RA24023 requiring the co-permit holders to sample and test raw groundwater from water well ID 135287, according to water well monitoring requirements prescribed by the NRCB in writing ("Sampling for Water Well Monitoring" Fact Sheet). The NRCB may, based on the monitoring results and at its discretion, revise those requirements from time to time, in writing.