

Decision Summary RA24004

This document summarizes my reasons for issuing Approval RA24004 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24004. 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 approval. For additional information on NRCB permits please refer to www.nrcb.ca.

1. Background

On January 24, 2024, Willem Dominicus on behalf of Jaap and Wilma Dominicus, operating as Dominicus Dairy Ltd., (Dominicus Dairy) submitted a Part 1 application to the NRCB to expand an existing dairy CFO.

The Part 2 application was submitted on October 22, 2024. On February 5, 2025, I deemed the application complete.

The proposed expansion involves:

- Increasing the permitted number of milking cows from 225 to 360 (plus associated dries and replacements)
- Constructing an expansion to the existing dairy barn – 25 m x 37 m (85 m x 37 m total dimensions)
- Expanding the existing earthen manure storage (EMS) – 80 m x 68 m x 4.5 m deep (total dimensions)

a. Location

The existing CFO is located at NW 23-42-27 W4M in Ponoka County, roughly 9 km southeast of Crestomere, Alberta. The CFO is on a parcel of land subdivided from this quarter section. A creek runs through this parcel of land and between the calf barn (with attached corral) and the rest of the CFO's manure collection storage areas. The entire site gently slopes and drains toward the creek.

b. Existing permits

The CFO is grandfathered, with a deemed registration under section 18.1 of AOPA. Since AOPA came into effect on January 1, 2002, the NRCB has issued the CFO several permits, the latest permit being Authorization RA17057A and previous to that, Approval RA11060. Approval RA11060 and the CFO's deemed registration allow Dominicus Dairy to construct and operate a 225 milking cow dairy CFO (associated dries and replacements are also allowed on site). The CFO's existing permitted facilities are listed in the appendix to the Approval RA24004.

2. Notices to affected parties

Under section 19 of AOPA, the NRCB notifies (or directs the applicant to notify) all parties that

are “affected” by an approval 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 person or 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 specified distance from the CFO, depending on the size of the CFO
- all persons who own or reside on land within a specified distance from the CFO, depending on the size of the CFO

For the size of this CFO the specified distance is 1 mile. (The NRCB refers to this distance as the “notification distance”).

A copy of the application was sent to Ponoka County, which is the municipality where the CFO is located.

The NRCB gave notice of the application by:

- posting it on the NRCB website,
- public advertisement in Ponoka News newspaper in circulation in the community affected by the application on February 5, 2025, and
- sending 7 notification letters to people identified by Ponoka County as owning or residing on land within the notification distance.

The full application was made available for viewing during regular business hours at the NRCB Red Deer office.

3. Notice to other persons or organizations

Under section 19 of AOPA, 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), Alberta Agriculture and Irrigation (AGI), and Alberta Transportation & Economic Corridors (TEC).

I also sent a copy of the application to ATCO Gas and Pipelines Ltd. as they are a right of way holder.

I received a response from Ms. Cheryl Marcynuik, a development and planning technologist with TEC, and from Ms. Laura Partridge, a senior water administration officer with EPA.

In their response, Ms. Marcynuik stated that TEC does not have any objections to the application, and that the application falls outside of the referral area to Highway 53.

In their response, Ms. Partridge responded to the applicant directly and stated that the current licensing for the operation is for 170 milking cows, and that additional licensing will be required for the proposed increase in livestock. Ms. Partridge also stated that there are 4 existing authorizations and one registration at the site and directed the applicant to arrange to have an

aquifer test completed and a hydrogeological report written. The applicant is reminded that it is their responsibility to ensure they have sufficiently licensed water under the *Water Act* for the proposed expansion.

I did not receive any other responses.

Approval RA24004 does not relieve the permit holder from complying with other applicable laws, such as safety codes, other municipal bylaws, provincial legislation (e.g. *Historical Resources Act*), and federal legislation (e.g. *Migratory Birds Convention Act*).

4. Alberta Land Stewardship Act (ALSA) regional plan

Section 20(10) 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 existing CFO is located.

5. Municipal Development Plan (MDP) consistency

I have determined that the proposed CFO expansion is consistent with the land use provisions of Ponoka 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 expansion:

- 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 11 and in Appendix D, the application meets all relevant AOPA requirements. The exemptions and conditions that are required to address the AOPA requirements around water well setbacks are discussed in the following parts of this decision summary.

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

Ms. Robin Dubitz, a development officer with Ponoka County, provided a written response on behalf of Ponoka County. Ms. Dubitz stated that the application is consistent with Ponoka County's land use provisions of the municipal development plan provided the applicant shows proof of ownership for both parcels of land included in the application. Ms. Dubitz further stated that the County must see proof that a lot consolidation and/or lot line adjustment between the 15.94 acres (pt. NW 23-42-27-W4 Lot 1, Plan 9223357) with 144.05 acres (pt. NW 23-42-27-W4) to meet setbacks.

On April 16, 2025, Ms. Dubitz provided a second written response on behalf of Ponoka County stating that the County had received a copy of the legal agreement required to satisfy the County's requirement of land acquisition to accommodate setbacks. The application's consistency with the land use provisions of Ponoka County's municipal development plan is addressed in Appendix A, attached.

Apart from municipalities, any member of the public may request to be considered "directly affected." The NRCB received a response from one individual.

The individual who submitted a response owns or resides on land within the one-mile notification distance for affected persons. Because of their location within this distance, and because they submitted a response, they qualify for directly affected party status. (See NRCB Operational Policy 2016-7: Approvals, part 7.2.1)

The directly affected party raised concerns regarding safe drinking water and manure handling/containment. These concerns are addressed in Appendix B. Conditions have been attached to the approval to address concerns regarding groundwater contamination (see Appendix D).

8. Environmental risk of CFO 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 monitoring for the facility. In this case, due to the proximity of water wells to the proposed barn and EMS expansions, groundwater monitoring is required for water well ID's 2088980 and 275663.

When reviewing a new approval application 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 Dominicus Dairy's existing CFO facilities were assessed in 2011 and 2017. According to these assessments, the facilities posed a low potential risk to surface water and groundwater except for the dairy barn, which posed a moderate risk to groundwater.

Approval RA11060 addressed this risk by including a condition that requires groundwater monitoring for water well ID 275663 which is located less than 10 meters from the dairy barn. This condition will be carried forward into Approval RA24004.

There have been no changes related to groundwater or surface water protection, water wells, or CFO facilities since those assessments were done. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

Additionally, due to concerns raised by a directly affected party, and to exercise caution, I carried out a risk screening for the proposed barn and EMS expansions using the ERST. These appear to be the CFO's highest risk facilities because they are intended to collect and store liquid manure and are within the 100 m setback to water wells. The assessment found that the proposed expansions pose a low potential risk to groundwater and surface water.

9. Exemptions

I determined that the proposed barn expansion and EMS expansion are located within the required AOPA setback from water wells. As explained in Appendix C, an exemption to the 100 m water well setback is warranted due to the well's construction and maintenance, AOPA approved liners for both expansions, and the fully enclosed concrete nature of the dairy barn expansion. A water well monitoring condition will also be required in the approval to address the results of a water well exemption screening that I completed (see Appendix D, below).

10. Other factors

Because the approval application is consistent with the MDP land use provisions, and meets the requirements of AOPA and its regulations, I also considered other factors.

AOPA requires me to consider matters that would normally be considered if a development permit were being issued. The NRCB interprets this to include aspects such as property line and road setbacks related to the site of the CFO. (*Grow North*, RFR 2011-01 at page 2). Approval officers are limited to what matters they can consider though as their regulatory authority is limited.

Ms. Dubitz listed the setbacks required by Ponoka County's land use bylaw (LUB) and noted that the application does not meet the 10-meter south side property line setback requirement. However, the applicant has since purchased the parcel of land directly south of the property line and thus the proposed expansion meets this setback. This information was confirmed by the County.

I have considered the effects the proposed expansion may have on natural resources administered by provincial departments. EPA has not made me aware of statements of concern submitted under section 73 of the *Environmental Protection and Enhancement Act* or section 109 of the *Water Act* in respect of the subject of this application. Furthermore, the application meets AOPAs technical requirements, and the applicant has been reminded that it is their responsibility to ensure they have received the appropriate water licensing for the proposed CFO expansion.

I am not aware of any written decision of the Environmental Appeals Board for this location (<https://eab.gov.ab.ca/status.htm>), accessed May 8, 2025.

Finally, I considered the effects of the proposed expansion on the environment, the economy, and the community, and the appropriate use of land. In doing so, I had before me information in the application, views from Ponoka County, and my own observations from site visits.

Consistent with NRCB Operational Policy 2016-7: Approvals, part 9.10.9, I presumed that the effects in the environment are acceptable because the application meets all of AOPA's technical requirements. In my view, this presumption is not rebutted and the directly affected party's concerns have been addressed.

Consistent with NRCB Operational Policy 2016-7: Approvals, part 9.10.9, if the application is consistent with the MDP then the proposed development is presumed to have an acceptable effect on the economy and community. In my view, this presumption is not rebutted and the directly affected party's concerns have been addressed.

I also presumed that the proposed CFO expansion is an appropriate use of land because the application is consistent with the land use provisions of the municipal development plan (see NRCB Operational Policy 2016-7: Approvals, part 9.10.9). In my view, this presumption is not rebutted.

11. Terms and conditions

Approval RA24004 specifies the cumulative permitted livestock capacity as 360 milking cows (plus associated dries and replacements) and permits the construction of the addition to the existing dairy barn and the expansion of the existing EMS.

Approval RA24004 contains terms that the NRCB generally includes in all AOPA approvals, 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, Approval RA24004 includes conditions that generally address construction deadline, monitoring, document submission and construction inspection. For an explanation of the reasons for these conditions, see Appendix D.

For clarity, and pursuant to NRCB policy, I consolidated the following permits with Approval RA24004: Authorizations RA17075A, RA08004 and RA06026, and Approval RA11060 (see NRCB Operational Policy 2016-7: Approvals, part 11.5). Permit consolidation helps the permit holder, municipality, neighbours and other parties keep track of a CFO's requirements, by providing a single document that lists all the operating and construction requirements. Consolidating permits generally involves carrying forward all relevant terms and conditions in the existing permits into the new permit, with any necessary changes or deletions of those terms and conditions. This consolidation is carried out under section 23 of AOPA, which enables approval officers to amend AOPA permits on their own motion. Appendix D discusses which conditions from the historical permits are or are not carried forward into the new approval.

12. Conclusion

Approval RA24004 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24004.

Authorizations RA17075A, RA08004 and RA06026, and Approval RA11060 are therefore superseded, and their content consolidated into this Approval RA24004, unless Approval

RA24004 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Authorizations RA17075A, RA08004 and RA06026, and Approval RA11060 will remain in effect.

June 4, 2025

(Original signed)

Sarah Neff
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Determining directly affected party status and concerns raised by directly affected parties
- C. Exemptions from water well setbacks
- D. Explanation of conditions in Approval RA24004

APPENDIX A: Consistency with the municipal development plan

Under section 20 of AOPA, an approval officer may only approve an application for an approval or amendment of an approval 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 20(1.1) 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.)

Dominicus Dairy’s CFO is located in Ponoka County and is therefore subject to that county’s MDP. Ponoka County adopted the latest revision to this plan in September 2023, under Bylaw 6-08-MDP.

Section 2 of the MDP contains eight numbered policies that relate to applications for CFOs under AOPA. These eight policies are discussed below. Three other MDP policies relate to CFOs below the AOPA permit threshold or to proposed residential developments near existing CFOs and as such, are irrelevant to my MDP consistency determination.

Under policy 2.1, the County “encourages” the development of CFOs to add value to crop production and provide “more employment and income per acre of land”. However, policy 2.1 also states that the environment and neighbours’ rights “must be protected”. This policy likely isn’t a “land use provision” but provides a general context for interpreting and applying the other policies in section 2.

Policy 2.2 states the County’s “belie[f] that very large CFOs are inappropriate in this part of Alberta and requests the NRCB not to allow them here.” This policy defines “very large” as “more than ten times” the threshold for approvals in the Part 2 Matters Regulation under AOPA. In this case, a “very large” dairy CFO would have over 2,000 milking cows. This policy likely isn’t a “land use provision”. Nevertheless, Dominicus Dairy’s proposed expansion is for only 360 milking cows (plus associated dries and replacements), so the proposed expansion would be consistent with this policy.

Policy 2.3 has two parts. The first part lists three setbacks and two exclusion zones for new CFOs. Dominicus Dairy’s CFO is an existing CFO; therefore, these policies do not apply to this application.

The second part of policy 2.3 calls for “very strict conditions on manure handling and storage” in the Chain Lakes and Maskwa Creek watersheds. This policy likely isn’t a “land use provision” because it calls for discretionary judgements about what conditions are “very strict”.

In addition, this policy may well be precluded from my consideration under section 20(1.1) of AOPA, which precludes an approval officer from considering MDP provisions “respecting tests or conditions related to the construction of or the site for a confined feeding operation or manure storage facility” and regarding the land application of manure. Regardless, the existing CFO and the proposed expansion meet AOPA’s technical requirements for manure handling and storage and those requirements are arguably “very strict”. Therefore, the application would be consistent with this section if the section applied.

Policy 2.4 calls for the NRCB to “set strict rules for the timely incorporation of manure spread within a mile of any urban municipality or rural residence”. This is a “test or condition” respecting application of manure under section 20(1.1) of AOPA, so I am precluded from considering this policy. At any rate, Dominicus Dairy’s CFO will be subject to the Standards and Administration Regulation under AOPA. This regulation provides rules for the land application of manure, including timely incorporation in specified circumstances. These rules are arguably “strict”, which is consistent with this MDP policy.

Policy 2.5 precludes the siting of CFOs within two miles of “any lake” unless the “regulators” are “convinced” that the CFO’s manure management system is “fail-safe”, and the CFO poses “no reasonable risk of contamination of the lake”. There are no lakes within 2 miles of the existing CFO; therefore, this policy doesn’t apply.

Policy 2.6 precludes new or expanded CFOs where there is “any risk that runoff will contaminate domestic water supplies”. Policy 2.6 likely is not a “land use provision” because it calls for discretionary judgements about acceptable risks. (On its face, “any risk” is a low-risk threshold, but the threshold is presumably more than “minor” or “insignificant”.) At any rate, the existing CFO and the proposed expansion have adequate runoff control and meet AOPA’s operational and construction requirements, which are designed to minimize the risks to surface and groundwater.

Policy 2.8 states that “where a new CFO is proposed, the [minimum distance separation] MDS should be contained entirely within land owned by the operator of the CFO...” Dominicus Dairy’s application is for an existing CFO; therefore, this section does not apply. Furthermore, this is not a land use provision, but rather a “test or condition” that relates to MDS, so I am precluded from considering this policy. At any rate, the proposed expansion meets the MDS to all neighbouring residences.

Lastly, 2.11 states that the County “may develop policies to reduce the nuisance caused by the spreading of manure near residences,” including ones that require the immediate incorporation of manure and limits on the timing or rate of manure application. I am unaware of any manure application policies that the County has developed under policy 2.11. At any rate, section 20(1.1) of AOPA precludes me from considering policy 2.11 because it relates to manure application.

For these reasons, I conclude that the application is consistent with the land use provisions of Ponoka County’s MDP that I may consider. As noted above, Ponoka County’s response did not raise any concerns with this application, which supports my conclusion.

APPENDIX B: Determining directly affected party status and concerns raised by directly affected parties

The following individual qualifies for directly affected party status because they submitted a 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:

- Cam Tatlock
S½ of SE-23-42-27-W4M

The directly affected party raised the following concerns: safe drinking water, access to sufficient water, manure handling/spreading and manure containment.

Source of water for the proposed CFO expansion

In their submission, Mr. Tatlock expressed concerns regarding insufficient water for the proposed CFO expansion, whether the additional water would be coming from the same aquifer, from creeks, or trucked in, and the potential depletion of the aquifer that Dominicus Dairy currently draws from.

Approval officer comments:

Alberta Environment and Protected Areas (EPA) is directly responsible for licensing the use of groundwater and surface water under the *Water Act*. Therefore, for efficiency and to avoid inconsistent regulation, NRCB approval officers generally do not consider water supply concerns when reviewing AOPA permit applications, other than ensuring applicants sign one of the water licensing declarations. As noted in Technical Document RA24004, Dominicus Dairy signed Option 2: Processing the AOPA permit and *Water Act* licence separately and provided their licence application number. On behalf of EPA, Ms. Laura Partridge responded to the referral for this application indicating that Dominicus Dairy will require additional licensing under the *Water Act* for the proposed increase in livestock. She also included in her response that Dominicus Dairy currently has 4 existing authorizations (one registration and 3 licences). Ms. Partridge stated directly to the applicant that they must arrange to have an aquifer test completed and a hydrogeological report written. Dominicus Dairy is reminded that it is their responsibility to obtain sufficient licensing and be compliant with the *Water Act* for the proposed CFO expansion.

Contamination of water

In their submission, Mr. Tatlock expressed concerns regarding contamination of surface water and groundwater, and potentially unsafe drinking water should the aquifer or nearby creek become contaminated from the CFO.

Approval officer comments:

AOPA and its regulations contain several requirements to prevent or minimize manure leakage from CFO facilities and thus prevent manure from a CFO from reaching and contaminating surface water and groundwater. One of these requirements is the setback from water wells set out in Section 7(1)(b) of the Standards and Administration

Regulation, which prohibits the construction of a manure storage facility or manure collection areas (MSF/MCA) within 100 m of water wells. Another requirement is the setbacks from common bodies of water set out in Section 7(1)(c) of the Standards and Administration Regulation, which prohibits the construction of a manure storage facility or manure collection area less than 30 m from a common body of water.

During my site visits and via aerial imagery, I did not note any common bodies of water within 30 m of the proposed CFO facilities. There is a creek that runs through the CFO site north of the facilities, however, the proposed EMS expansion and dairy barn expansion meet the required setback from this common body of water. Additionally, the existing EMS is located approximately 184 meters from the creek, with the proposed expansion to be extended south of the existing facility; therefore, the EMS will not be encroaching any closer to the creek.

Regarding contamination of groundwater, I note that there are 2 wells located within 100 meters from the proposed EMS and barn expansions. As explained in section 9 above and in Appendix C, an exemption to the setback has been granted for the proposed barn and EMS expansions due to construction and maintenance of the wells, AOPA approved liners for both expansions, and the fully enclosed concrete nature of the dairy barn expansion. Additionally, water well monitoring conditions will be included in Approval RA24004 for water well ID's 2088980 and 275663 to address the proximity of the water wells to CFO facilities.

Additionally, as noted in section 8 above, I assessed the proposed EMS and dairy barn expansions using the NRCB's ERST to determine the level of risk they pose to surface water and groundwater. According to the ERST, the proposed expansions of the facilities pose a low potential risk to surface water and groundwater and meet all AOPA groundwater protection requirements for the floors and liners of MSFs/MCAs. The information contained in the application and in the engineer's soil investigation and measurements from existing monitoring wells did not indicate a shallow water table. However, I acknowledge that the height of the water table can vary over time, based upon the time of year or precipitation events. AOPA requires that facilities must meet a minimum of a one metre separation between the bottom of the liner or protective layer of an MSF/MCA and the water table, at the time of construction. To address the concern regarding the potential contamination of groundwater, I have included a condition in the approval for the proposed EMS expansion that construction is to immediately cease and the NRCB be contacted should the water table be observed to be 1 meter or less from the bottom of the facility's liner at the time of construction.

Manure handling and containment

In their submission, Mr. Tatlock expressed concern regarding available land for manure spreading, whether the EMS has sufficient capacity in the event of heavy rainfall, and whether the EMS is an acceptable method of liquid manure containment particularly with the creek being nearby.

Approval officer comments:

Regarding spreading lands, it is the applicant's responsibility to provide enough land in their application required for the proposed increase in manure production. As seen in Technical Document RA24004, Dominicus Dairy listed 357 hectares of usable land in

the black zone. The required spreading land for this CFO with the proposed increase of 360 milking cows (plus associated dries and replacements) is 334.1 hectares; therefore, the application meets the required land base for manure spreading. The applicant also included in their application two signed manure spreading agreements.

As noted in my response to water contamination, the proposed EMS expansion meets all AOPA groundwater protection requirements for the liners of MSFs and was found to pose a low risk to surface water and groundwater. As noted in Technical Document RA24004, the required 9-month storage capacity for the proposed increase in livestock is 11,502 m³. The proposed EMS expansion will provide the applicant with a total capacity of 13,972 m³, which exceeds the minimum 9-month storage requirement. In addition to the conditions regarding water well monitoring and construction above the water table, a condition will be included in Approval RA24004 requiring the applicant to provide engineer signoff confirming that the EMS was constructed with the proposed dimensions, including depth and side slopes, and with the proposed liner as stated in the application and associated engineering reports.

APPENDIX C: Exemptions from water well setbacks

The proposed dairy barn expansion and EMS expansion are to be located less than 100 m from water wells. I have confirmed that 2 water wells are located less than 10 m from the barn expansion, and one well is located approximately 74 m from the EMS expansion during a site visit and via aerial imagery. 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 wells were constructed
- b. Whether the wells are being properly maintained
- c. The construction and manure management of the proposed facilities

These presumptions and considerations are based on NRCB Operational Policy 2016-7: Approvals, part 9.10.2.

Water well ID 275663

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located less than 10 m north of the dairy barn expansion and approximately 74 m east of the EMS expansion is likely EPA water well ID 275663. This well is reported to have been installed in 1981 and has a perforated or screened zone from 18.29 m to 24.38 m below ground level across shale and sandstone layers. The well has aboveground casing and is used for domestic and non-domestic purposes. The well's log does not identify any protective layers, as it lists only gravel/boulders, sandstone and shale layers. The well has a driven seal from ground surface to 6.1 m below ground level (across the gravel/boulder layers). 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.

Water well ID 2088980

Based on information provided by the applicant and from the Alberta Environment and Protected Areas (EPA) water well database, the water well located less than 10 m north of the dairy barn expansion is likely EPA water well ID 2088980. This well is reported to have been installed in 2017 and has a perforated or screened zone from 15.24 m to 24.38 m below ground level across shale and sandstone layers. The well has aboveground casing and is used for domestic and non-domestic purposes. The well's log does not identify any protective layers, as it lists only gravel/sand, sandstone and shale layers. The well has a bentonite seal from ground surface to 10.67 m below ground level (across the sand/gravel, shale and sandstone layers).

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 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 for the EMS expansion, and less likely for the dairy barn expansion as seen in Technical Document RA24004.

Under the regulation, an approval officer may require a groundwater monitoring program for the water wells in question. In my view, a monitoring program is required due to the results of the water well exemption screening tool, and the proximity of the water wells to the dairy barn expansion. Approval RA11060 contains a condition requiring annual sampling and testing of water well ID 275663. This condition will be brought forward to Approval RA24004. Additionally, I will be including a water well monitoring condition for water well ID 2088980.

Based on the above, I am prepared to grant an exemption to the 100 m water well setback requirement for the dairy barn expansion and EMS expansion.

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

APPENDIX D: Explanation of conditions in Approval RA24004

Approval RA24004 includes several conditions, discussed below, and carries forward a number of conditions from Approval RA11060 and Authorization RA17057A (see sections 2 and 3 of this appendix). Construction conditions from historical permits that have been met are identified in the appendix to Approval RA24004.

1. New conditions in Approval RA24004

a. Construction above the water table

Section 9(3) of the Standards and Administration Regulation under the *Agricultural Operation Practices Act* (AOPA) requires the bottom of the liner of a manure storage facility or manure collection area to be not less than one metre above the water table of the site “at the time of construction.”

The initial engineering report included with the application did not indicate a water table, as the investigative boreholes were only drilled to a depth of 1.5 mbgs. Upon further investigation and measurement from an existing monitoring well next to the existing EMS, the engineer reported the water table at 5.9 m.

Based on this information, the proposed EMS expansion meets the one metre requirement of section 9(3). However, because the height of the water table can vary over time, a condition is included in the approval requiring Dominicus Dairy to cease construction of the EMS expansion and notify the NRCB immediately if the water table is encountered during construction.

b. Construction Deadline

Dominicus Dairy proposes to complete construction of the proposed addition to the dairy barn and expansion to the EMS by December 2025. This timeframe does not account for possible material or labour delays. Therefore, the deadline of December 31, 2027, is included as a condition in Approval RA24004.

c. 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, Approval RA24004 includes conditions requiring:

- a. Dominicus Dairy to provide an engineer's completion report certifying that the EMS was constructed with the same liner material as that used for hydraulic conductivity testing and that the EMS was constructed according to the proposed procedures and design specifications included in Envirowest Engineering reports (dated January 29, 2025, and September 20, 2024), including liner thickness, depth, side slopes and location.
- b. the concrete used to construct the liner of the manure collection and storage portion of the dairy barn expansion to meet the specification for category C (solid manure – wet) in Technical Guideline Agdex 096-93 “Non-Engineered Concrete Liners for Manure Collection and Storage Areas”.
- c. Dominicus Dairy to provide documentation to confirm the specifications of the concrete used to construct the manure storage and collection portions of the dairy barn expansion.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed in accordance with the permit requirements. To be effective, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Approval RA24004 includes conditions stating that Dominicus Dairy shall not place livestock or manure in the manure storage or collection portions of the new dairy barn expansion, nor place manure in the expanded portion of the EMS until NRCB personnel have inspected the facilities and confirmed in writing that they meet the approval requirements.

d. Water well monitoring

As noted in Decision Summary RA24004 and Technical Document RA24004, the Water Well Exemption Screening Tool scores indicated an exemption is likely for the EMS expansion, and less likely for the dairy barn expansion. Additionally, due to the proximity of water well ID # 2088980 to the proposed expansions, a condition will be included in Approval RA24004 requiring the permit holder to sample and test raw groundwater from water well ID # 2088980, 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.

2. Conditions carried forward and modified from Approval RA11060 and Authorization RA17057A

Pursuant to section 23 of AOPA (approval officer amendments), I have determined that operating condition 4 from Approval RA11060 should be carried forward and modified to better reflect the current CFO operation and updated NRCB policies. Additionally, operating condition 5 from Approval RA11060 and condition 10 from Authorization RA17057A should be carried forward.

Condition # 4. Water Well Testing Reporting

- a. The applicant must provide the results of a drinking water quality test from the water well to the east of the existing dairy barn on NW 23-42-27W4 to the NRCB on an annual basis by November 30 of each year.
- b. This frequency of sampling and testing may be varied by written notice from the NRCB.

Condition # 5. Flooded areas

The operator must maintain the flood prevention plan for the creek on the NW 23-42- 27W4.

Condition # 10. Protection of water well 275663

The permit holder shall maintain the mounded and compacted soil around water well 275663. The soil must be high enough to prevent any surface water from reaching the well and prevent water from ponding around the well.

3. Conditions not carried forward from Authorization RA17057A

Approval RA24004 includes the terms and conditions in Authorization RA17057A, except those noted below.

11. Livestock numbers

Unless otherwise directed by the NRCB in writing, the permit holder shall maintain and make available to the NRCB, upon request, an ongoing monthly record of the number of milking cows

at Dominicus Dairy to demonstrate that the number remains at or below the permitted capacity of 225 milking cows. This monthly record must be maintained for a minimum of at least 5 years.

This condition was included in Authorization RA17057A because, at the time, Dominicus Dairy had increased space but did not apply to increase dairy cow numbers. Since the current application proposes an increase in numbers, the condition is no longer required. Therefore, pursuant to section 23 of AOPA (approval officer amendments), I have determined that condition 11 from Authorization RA17057A should be deleted and therefore is not carried forward to Approval RA24004.