



Decision Summary RA24018

This document summarizes my reasons for issuing Approval RA24018 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA24018. 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 April 15, 2024, Martin Van Aken on behalf of Van Aken Farms Ltd. (Van Aken Farms) submitted a Part 1 application to the NRCB to change the animal category from dairy to beef finishers and expand an existing CFO.

On May 27, 2024, the NRCB issued Van Aken Farms a Compliance Directive for unauthorized construction, as pens 4-7 were constructed without a permit. Van Aken Farms was directed to depopulate and permanently close these pens by August 31, 2024, unless an NRCB permit had been obtained. This deadline was extended on September 12, 2024, until November 30, 2024.

The Part 2 application was submitted on August 30, 2024. On September 18, 2024, I deemed the application complete.

The proposed change in animal category and expansion involves:

- Decreasing the number of dairy cows (plus associated dries and replacements) from 190 to zero
- Increasing the number of beef finishers from zero to 2,500
- Constructing a feedlot pen row (3 pens previously permitted; one pen constructed without a permit; one pen not yet constructed nor permitted) – 175 m x 30 m (total area)
- Constructing two feedlot pen rows – 177 m x 35 m each (some pens constructed without a permit)
- Constructing a catch basin – 29 m x 29 m x 3.5 m deep
- The applicant also requested a variance under section 17 of AOPA of the prohibition against manure storage facilities and manure collection areas less than 100 metres away from water wells. That variance request is discussed in Appendix C and section 9, below.

a. Location

The existing CFO is located at NE 19-42-26 W4M in Ponoka County, roughly 10 kilometers southwest of Ponoka, Alberta. The terrain is generally flat. The closest common water body is a seasonal drain, approximately 500 m southeast of the proposed facilities.

b. Existing permits

To date, the CFO has been permitted under NRCB Registration RA02029A. That permit allowed

the construction and operation of a 190 cow dairy (plus associated replacements and dry stock) CFO. The CFO's existing permitted facilities are listed in the appendix to the Approval RA24018.

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 1.5 miles. (The NRCB refers to this distance as the "notification distance".)

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 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 September 18, 2024, and
- sending 18 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.

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.

A referral letter and a copy of the complete application was emailed to Alberta Environment and Protected Areas (EPA).

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

Ms. Laura Partridge, a senior water administration officer, provided a response on behalf of EPA. Ms. Partridge provided links and resources to help the applicant view their existing licences, determine if they have sufficient water requirement, and how to apply if additional

water is required. The applicant is reminded that they are required to have sufficient water licences for their proposed number of livestock.

No other responses were received.

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 proposed CFO is to be located.

5. Municipal Development Plan (MDP) consistency

I have determined that the proposed 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 nearby residences, with one exception (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS). The owner of that residence has signed a written waiver of the MDS requirement to their residence
- 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 12 and in Appendix D, the application meets all relevant AOPA requirements. The variance and exemption that are required to address the AOPA requirements around water well setbacks are discussed in Appendices B and C to 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 existing CFO 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. The application's consistency with the land use provisions of Ponoka County's municipal development plan is addressed in

Appendix A, attached.

No responses were received from any other person, organization, or member of the public.

The NRCB considers a person who owns a residence within the MDS of the CFO, and who waives the MDS requirements in writing to be automatically considered a directly affected (see NRCB Operational Policy 2016-7: Approvals, part 7.2.1). W. Oosterhof provided an MDS waiver and is a directly affected party.

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, or porous subsurface materials, and surface water systems an approval officer may require groundwater monitoring for the facility. The information on this file supports the assumption that risks to groundwater and surface water are low. However, the NRCB already has a groundwater monitoring program in place at this site via a water well testing condition. This condition will be carried forward into Approval RA24018.

The existing EMS was assessed in 2008, as part of the leak detection program. The applicant intends to continue using the EMS, as they keep some calves in the barn. That assessment found that the EMS had a low potential risk to groundwater and surface water. I've reviewed this assessment and agree with its findings; however, the NRCB has since updated the ERST tool. Accordingly, I reassessed the EMS with the updated tool. My assessment found that the EMS posts a low potential risk to groundwater and surface water. The EMS appears to be the CFO's highest risk facility, as liquid manure is considered higher risk than solid manure. Therefore, 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.

9. Variances

The applicant applied for a variance of the requirement for a water well to be at least 100 m away from a manure storage facility. I determined that the existing feedlot pen #4, which was constructed without a permit, is located within the required AOPA setback from an existing water well. As explained in Appendix C, I am prepared to issue a variance to the 100 m water well setback due to how the well was constructed, as well as the upslope nature of the well in relation to the pen area.

10. Exemptions

I determined that the proposed second row of pens is located within the required AOPA setback from a water well. As explained in Appendix B, an exemption to the 100 m water well setback is warranted due to how the well was constructed, as well as the upslope nature of the well in relation to the pen area.

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

I have considered the effects the proposed CFO expansion may have on natural resources administered by provincial departments. EPA has not made me aware of any statements of concern submitted under section 73 of the *Environmental Protection and Enhancement Act* or under section 109 of the *Water Act* in respect of the subject of this application. Furthermore, the application meets AOPA's technical requirements.

I am not aware of any written decision of the Environmental Appeals Board for this location (<https://www.eab.gov.ab.ca/status.htm>, accessed November 18, 2024).

Finally, I considered the effects of the proposed expansion on the environment, the economy, and the community, and the appropriate use of land.

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.

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.

I also presumed that the proposed 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.

12. Terms and conditions

Approval RA24018 specifies the cumulative permitted livestock capacity as 2,500 beef finishers and permits the construction of the livestock pens and catch basin.

Approval RA24018 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 RA24018 includes conditions that generally address construction deadlines, 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 Registration RA02029A with Approval RA24018 (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.

13. Conclusion

Approval RA24018 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA24018.

Registration RA02029A is therefore superseded, and its content consolidated into this Approval RA24018, unless Approval RA24018 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Registration RA02029A will remain in effect.

November 29, 2024

(Original signed)
Lynn Stone
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Exemption from water well setbacks
- C. Variances
- D. Explanation of conditions in Approval RA24018

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.)

Van Aken 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 in September 2023, under By-law 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.)

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 it 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” beef finisher CFO would have over 3,500 head. This policy likely isn’t a “land use provision”. Nevertheless, Van Aken’s proposed expansion is for only 2,500 beef finishers, so the proposed expansion is consistent with this policy.

Policy 2.3 has two parts. The first part lists three setbacks and two exclusion zones for new CFOs. Van Aken’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 meets AOPA’s technical requirements for manure handling and storage and those requirements are arguably “very strict”. Therefore, the existing CFO 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, Van Aken’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, and therefore, the existing CFO would be consistent with this section if the section applied.

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 meets 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.” Van Aken’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.

Last, 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 relevant land use provisions of Ponoka County’s MDP. As noted above, Ponoka County’s response did not raise any concerns with this application, which supports my conclusion.

APPENDIX B: Exemption from water well setbacks

1. Water Well Considerations

One of the proposed feedlot pens is to be located less than 100 m from a water well. I have confirmed that one water well is located approximately 90 m from it during a site visit. 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), and, if required, a groundwater monitoring program is implemented.

The potential risks of direct aquifer contamination from the MSF are presumed to be low if the applicant's proposed MSF 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 well:

- a. How the well was constructed
- b. Whether the well is being properly maintained
- c. The distance between the well and the proposed MSF
- d. Whether the well is up- or down-gradient from the MSF 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 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 90 m northeast of the proposed feedlot pen is likely EPA water well ID #277270. This well is reported to have been installed in 1996 and has a perforated or screened zone from 42.67 m to 48.77 m below ground level across stratigraphy. The well has an above ground casing. This well is used for non-domestic purposes. The well's log identifies protective layer ground surface to 3.05 m below ground level. The well has a bentonite seal from ground surface to 31.09 m below ground level (across the shale and sandstone layers). The well appeared to be in good condition at the time of my site inspection and its casing is partially protected by the barn. The well is up-gradient of the proposed feedlot pen.

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

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

In this case, the results of the water well exemption screening tool suggest that an exemption is likely as seen in Technical Document RA24018.

Under the regulation, an approval officer may require a groundwater monitoring program of the water well in question. The site already has a groundwater monitoring program in place, including the water well in question. That condition will be carried forward to Approval RA24018.

Based on the above, I am prepared to grant an exemption to the 100 m water well setback requirement for the feedlot pen.

APPENDIX C: Variances

The closest feedlot pen that was already constructed (without a permit) is located less than 100 m from a water well. I have confirmed that one water well is located approximately 81 m from it during a site visit and by 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 Board Decision 03-04, *AAA Cattle Ltd.* p 24). I will consider whether a variance is warranted to the water well below.

1. Water Well Considerations

On November 13, 2024, Van Aken applied for a variance under section 17(1) of AOPA that due to the upslope nature of the well and the presence of a constructed liner, this provides the same or greater degree of protection and safety as that provided by the regulations.

In this case, the facility has already been constructed (without a permit). 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.

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 storage facility (MSF). In this case I presume that the risks of direct aquifer contamination from the MSF are low if the MSF meets (or otherwise meets) AOPA's technical requirements to control runoff and leakage. However, when determining whether an 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.

One indicator that a variance provides the same or greater protection and safety is if the aquifer into which the well is drilled is not likely to be contaminated by the proposed MSF.

The potential risks of direct aquifer contamination from the MSF are presumed to be low if the applicant's proposed MSF meets AOPA's technical requirements to control runoff and leakage. Approval officers may 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 protection of the aquifer in relation to the water well:

- a. How the well was constructed
- b. Whether the well is being properly maintained
- c. The distance between the well and the proposed MSF
- d. Whether the well is up- or down-gradient from the MSF and whether this gradient is a reasonable indication of the direction of surface and groundwater flow between the two structures

The 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 81 m

northeast of the unauthorized feedlot pen is likely EPA water well ID #277270. This well is reported to have been installed in 1996 and has a perforated or screened zone from 42.67 m to 48.77 m below ground level across stratigraphy. The well has an above ground casing. This well is used for non-domestic purposes. The well's log identifies protective layer ground surface to 3.05 m below ground level. The well has a bentonite seal from ground surface to 31.09 m below ground level (across the shale and sandstone layers). The well appeared to be in good condition at the time of my site inspection and its casing is partially protected by the barn. The well is up-gradient of the unauthorized feedlot pen.

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 well². This tool is useful in gauging the level of protection of groundwater.

The water well exemption screening tool indicates that there is a low potential for groundwater to be impacted by the MSF. It is my opinion that in this case, the water well provides an equivalent level of protection if an exemption was considered.

Based on the above information it is my assessment that varying the 100 m setback rule for the feedlot pen would offer the same degree of protection and safety as that provided for by the regulations for the following reasons:

1. The upslope nature of the water well from the unauthorized feedlot pen
2. The presence of a constructed liner between the bottom of the pen floor and the uppermost groundwater resource
3. The high level of protection of the water well, due to its construction and bentonite seal
4. The water well in question is already tested as part of a groundwater monitoring program

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

² 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 RA24018

Approval RA24018 includes several conditions, discussed below, and carries forward two conditions from Registration RA02029A (see sections 2 and 3 of this appendix). Construction conditions from historical Registration RA02029A that have been met are identified in the appendix to Approval RA24018.

1. New conditions in Approval RA24018

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.”

Based on this information, the proposed catch basin 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 requiring Van Aken Farms to cease construction and notify the NRCB immediately if the water table is encountered during construction.

b. Groundwater protection requirements-catch basin and new feedlot pens

Van Aken Farms proposes to construct the new catch basin and new feedlot pens with a 0.5 metre thick compacted soil liner. 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, Van Aken 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.

The regulations provide that the actual hydraulic conductivity of a one-metre thick compacted soil liner must not be more than 5×10^{-7} cm/sec for a catch basin, and 0.5 m thick compacted soil liner must not be more than 5×10^{-7} cm/sec for the feedlot pens.

In this case, the lab measurement was 6.6×10^{-10} cm/sec. With the required ten-fold modification, the expected field value is 6.6×10^{-9} cm/sec. This expected value is below (better than) 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 catch basin adequately protects groundwater, Approval RA24018 includes conditions requiring Van Aken Farms to provide an engineer’s completion report certifying that the catch basin and feedlot pens were constructed with the same liner material as that used for hydraulic conductivity testing and that the catch basin and feedlot pens were constructed according to the proposed procedures and design specifications.

c. Liner verification for already constructed feedlot pens

Van Aken Farms has already constructed feedlot pens without a permit. In order to ensure that the constructed pens adequately protect groundwater, Approval RA24018 includes conditions requiring an engineer assess the already constructed liner and provide a report with specific requirements to the NRCB.

d. Construction Deadline

Van Aken did not propose a construction deadline in their application. In my experience, allowing for three full construction seasons is realistic for a project of this scope.

The deadline of November 30, 2027, is included as a condition in Approval RA24018.

e. Post-construction inspection

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 RA24018 includes conditions stating that Van Aken Farms shall not place livestock or manure in the manure storage or collection portions of the new feedlot pens, or allow manure impacted runoff to enter the catch basin until NRCB personnel have inspected the feedlot pens and catch basin and confirmed in writing that they meet the approval requirements.

2. Conditions carried forward and modified from Registration RA02029A

Pursuant to section 23 of AOPA (approval officer amendments), I have determined that conditions 4 (leakage monitoring of EMS) and 7 (water well testing) from Registration RA02029A should be carried forward. The conditions will be modified slightly to reflect current practices, with the requirements outlined in the attached monitoring statements.

3. Conditions not carried forward from Registration RA02029A

Approval RA24018 includes the terms and conditions in Registration RA02029A, except those noted below.

Pursuant to section 23 of AOPA (approval officer amendments), I have determined that conditions 1a (operation required to follow AOPA requirements), and 6 (manure application; incorporation within 48 hours and keeping application records) from Registration RA02029A should be deleted and therefore are not carried forward to Approval RA24018. I am deleting these conditions as they are redundant. Approval RA24018 contains a general condition that the operation must follow AOPA and its regulations, including manure application and record keeping. Therefore, for clarity and conciseness, conditions 1a and 6 will be removed.

The remaining conditions in RA02029A are completed construction conditions and are listed in an appendix to Approval RA24018.