



Decision Summary LA24045

This document summarizes my reasons for issuing Approval LA24045 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA24045. 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 October 28, 2024, Rose Niedermier submitted a Part 1 and Part 2 application to the NRCB to construct a new beef CFO. The site is currently operated as a seasonal feeding and bedding site. On November 5, 2024, I deemed the application complete.

The proposed CFO involves:

- Increasing livestock numbers to 800 beef finishers
- Permitting east feedlot pens – 35 m x 115 m
- Permitting west feedlot pens – 31 m x 96 m
- Constructing east catch basin – 33 m x 13 m x 2 m deep
- Constructing west catch basin – 29 m x 13 m x 2 m deep

The west pen and most of the east pen have been used for seasonal feeding and bedding. The earthwork and fence replacement has been completed for the east pen. The operator is aware that they cannot house livestock in the new portion of the east pen (see area marked “2” on page 14 of Technical Document LA24045), until they have met their post-construction inspection condition in this Approval, and they have placed temporary livestock panels sectioning off the new portion.

a. Location

The proposed CFO is located at NE 20-8-20 W4M in Lethbridge County, roughly 5.5 km southwest of Coaldale, Alberta. The surrounding terrain is relatively flat with the site in a slight low spot. The nearest common body of water is an irrigation canal 2300 m away. There is a permitted feedlot directly across the road to the east and six lots of land zoned country residential (MDS category 2) to the west, with the nearest country residential zoned residence being 765 m away.

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 one mile. (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 and no boundaries of a neighbouring municipality is within the notification distance.

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

The NRCB gave notice of the application by:

- posting it on the NRCB website,
- public advertisement in the Sunny South News in circulation in the community affected by the application on November 5, 2024, and
- sending 26 notification letters to people identified by Lethbridge County as owning or residing on land within the notification distance.

The full application was made available for viewing during regular business hours at NRCB’s Lethbridge 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 Transportation & Economic Corridors (TEC), and to Alberta Health Services (AHS) in relation to health concerns from directly affected parties.

I also sent a copy of the application to the St. Mary River Irrigation District (SMRID), ATCO Gas, and the County of Lethbridge Rural Water Association as they are easement or right of way holders at this land location.

In their response, an EPA water administration technologist stated that there are no groundwater, surface water, or agricultural registrations to the land location of the operation and requested that conveyance agreements be provided to EPA. I forwarded this response to the applicant for their information and action.

In their response, a land administrator with SMRID noted that the applicant chose “Option 2: Processing the AOPA permit and Water Act license separately” on the application and stated that there is water available through the SMRID if needed. The applicant is reminded they are responsible for obtaining the appropriate water licence for the proposed CFO. If Rose Niedermeir starts constructing any facilities after I issue Approval RA24045, but before receiving its water licence, any such construction is at their own risk if the water licence application is

denied.

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.

As required by section 4(1) of the South Saskatchewan Regional Plan (SSRP), I considered that document's Strategic Plan and Implementation Plan and determined that the application is consistent with those plans. In addition, there are no notices or orders under the Regulatory Details portion of the SSRP that apply to this application.

5. Municipal Development Plan (MDP) consistency

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

- 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 water wells, 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 protective layers of manure storage facilities and manure collection areas

With the terms and conditions summarized in part 10 and in Appendix C, the application meets all relevant AOPA requirements.

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." Lethbridge County is an affected party (and directly affected) because the proposed CFO is located within its boundaries.

Ms. Hilary Janzen, a manager of planning and development with Lethbridge County, provided a written response on behalf of Lethbridge County. Ms. Janzen stated that the application is not consistent with Lethbridge County's land use provisions of the municipal development plan

because it states that CFOs are to be excluded from being established on parcels less than 80 acres and the parcel in question is 30 acres. The application's consistency with the land use provisions of Lethbridge County's municipal development plan is addressed in Appendix A, attached.

Additionally, Ms. Janzen noted that there is a large Grouped Country Residential zoned area within one mile of the proposed CFO. Ms. Janzen also noted that there is another feedlot across the road and it was requested that cumulative effects of the feedlots be considered.

There are six Grouped Country Residential zoned parcels to the west of the proposed CFO, but they are not considered 'large-scale country residential' (category 4) (see NRCB Operational Policy 2018-1: *Large Scale Country Residential Developments for Determining Minimum Distance Separation Approvals*). 'Large scale country residential' is defined as 10 or more adjacent lots of land zoned country residential. As there are only six adjacent lots, these parcels fall under MDS category two. Therefore, the proposed CFO meets the MDS requirements. Furthermore, I cannot consider both feedlots together as cumulative effects of CFOs are not considered to be within an approval officer's regulatory mandate. As stated in Board Decision RFR 2018-11 500016 AB Ltd, "cumulative effects associated with the number or concentration of confined feeding operations within any given area are not a relevant consideration under AOPA".

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

The three individuals who submitted a joint response own or reside 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 individuals raised concerns regarding nuisances, manure management, water table contamination, road use, disposal of dead animals, health concerns, chemical use, and animal welfare. These concerns are addressed in Appendix B. Conditions have been attached to the approval to address concerns about water table contamination (see section 10 and Appendix C).

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 directly affected (See NRCB Operational Policy 2016-7: *Approvals*, part 7.2.1). David Schapansky 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. In this case, it is not clear whether the catch basins, proposed to be 2 m deep, will meet the water table requirement at the time of construction. As part of my review of this application, I assessed the risk to the environment posed by the CFO's proposed 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 www.nrcb.ca.)

For the sake of efficiency, I first assessed the proposed catch basins using the ERST. These appear to be the CFO's highest risk facilities as they are below grade and will store manure contaminated run-off. The assessment found that these facilities pose a low potential risk to groundwater and surface water. Because these are the CFO's highest risk facilities, 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. Nevertheless, I have included conditions requiring that the construction of the catch basin be supervised by an engineer and to cease construction immediately if the water table is encountered during construction. These conditions are explained in Appendix C.

9. 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. Hilary Janzen listed the setbacks required by Lethbridge County's land use bylaw (LUB) and noted that the application appears to meet these setbacks. She also stated that the proposed CFO is not within an Intermunicipal Development Plan or Area Structure Plan area.

I have considered the effects the proposed CFO may have on natural resources administered by provincial departments. EPA has not made me aware of statements of concerns 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. I also did not receive any responses from any utility right-of-way holders.

I am not aware of a written decision of the Environmental Appeals Board for this location (<http://www.eab.gov.ab.ca/status.htm>), accessed January 6, 2025.

Finally, I considered the effects of the proposed CFO 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, responses from Lethbridge County, submissions from directly affected parties, 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 (subject to water table depth at the time of construction). In my view, this presumption is not rebutted and the directly affected parties' concerns have been addressed. See Appendix B for a discussion of odour, groundwater contamination, land application of manure, and road dust.

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 parties' concerns have been addressed. See Appendix A for a discussion of land use provisions in the MDP, and Appendix B relating to specific concerns from neighbours.

I also presumed that the proposed CFO 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 addition, the land where the CFO is located is zoned Rural Agricultural. In my view, this presumption is not rebutted.

10. Terms and conditions

Approval LA24045 specifies the cumulative permitted livestock capacity as 800 beef finishers and permits the use of the east feedlot pens and west feedlot pens, and the construction of the east catch basin and west catch basin.

Approval LA24045 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 LA24045 includes conditions that generally address construction deadlines, document submission and construction inspections. For an explanation of the reasons for these conditions, see Appendix C.

11. Conclusion

Approval LA24045 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA24045.

January 22, 2025

(Original signed)
Kailee Davis
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Concerns raised by directly affected parties
- C. Explanation of conditions in Approval LA24045

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.)

Rose Niedermier’s proposed CFO is located in Lethbridge County and is therefore subject to that county’s MDP. Lethbridge County adopted the latest revision to this plan on March 10, 2022, under Bylaw #22-001.

The policies pertaining to CFOs are in part 4, section 3 “Intensive Livestock/Confined Feeding Operations.”

Section 3.0 states that the county is supportive of CFOs in areas that are less prone to conflict and where municipal infrastructure can support such developments.

This is likely not a land use provision as it is subjective what can or cannot be supported by municipal infrastructure and that is not within NRCB’s discretion.

Section 3.1 and 3.2 states that new CFOs are not permitted in the MDP CFO exclusion areas (Maps 2A and 2B), IDP CFO exclusions areas, or in CFO exclusion zones of high density residential growth centres.

The proposed CFO is not in any exclusion areas identified in these policies and is therefore consistent with this policy.

Section 3.3 states that existing operations within an urban fringe district may be permitted to expand or make improvements with consideration to any IDP that allows for such.

The proposed CFO is not an existing operation, and not within an urban fringe district and is therefore consistent with this policy.

Section 3.4 pertains to the consistency of CFO exclusion zones across the county’s planning documents.

This policy is procedural in nature and is not a land use provision. Therefore, it is not relevant to my MDP consistency determination.

Section 3.5 states that CFOs shall not be supported to establish or expand within environmentally sensitive areas identified in the *Cotton Wood Report: County of Lethbridge: Environmentally Significant Areas in the Oldman River Region (1987)*.

The proposed CFO is not located within any environmentally sensitive areas identified in that report and is therefore consistent with this policy.

Section 3.6 states that “no part of a CFO building, structure, corrals, compost area, or stockpile is to be located within the property line and public roadway setbacks, including provincial highways, as outlined in the municipal Land Use Bylaw.”

The response provided on behalf of Lethbridge County states that the application appears to meet these setbacks.

Section 3.7 states that CFOs are discretionary uses only in areas zoned as Rural Agriculture with a minimum parcel size of 80 acres.

As noted in Lethbridge County’s response, the proposed CFO is within a land use district zoned as Rural Agricultural. In their response, they also stated that the proposed CFO is inconsistent with the MDP because the parcel size is 30 acres and not the 80 acres stipulated in this policy. Neither the MDP nor the County’s response indicates the rationale for the parcel size minimum. In my view, this provision is a test or condition that I am unable to consider as section 20(1.1) of AOPA states that approval officers shall not consider provisions respecting tests or conditions related to the site for a CFO. The restriction on parcel size is a condition for the site for a CFO. The application is consistent with the parts of this policy that I may consider.

Sections 3.8, 3.9, 3.10, and 3.11 discuss CFO operational practices with respect to AOPA, manure spreading, the use of a reciprocal MDS, and collaboration with the NRCB, respectively.

These policies are not land use provisions and therefore not relevant to my MDP consistency determination.

For these reasons, I conclude that the application is consistent with the land use provisions of Lethbridge County’s MDP that I may consider.

APPENDIX B: Concerns raised by directly affected parties

The following individual qualifies for directly affected party status because they own a residence within the minimum distance separation (MDS) and waived the MDS requirement in writing: David Schapansky. See NRCB Operational Policy 2016-7: *Approvals*, part 7.2.1.

The following individuals qualify 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 (see NRCB Operational Policy 2016-7: *Approvals*, part 7.2.1.)

- Victor and Marilyn Hafichuk, NW-20-8-20-4
- Martin Van Popta, NW-20-8-20-4

Martin Van Popta submitted a joint response with the above-mentioned Victor and Marilyn Hafichuk. Although Martin Van Popta was not listed on the list of property owners within the notification distance as provided by Lethbridge County, he provided a physical address indicating that he resides within the notification distance. I did not visit in person to confirm he lives at the residence, but for the above reason, I determined that it is appropriate under these circumstances to consider him as directly affected.

The directly affected parties raised the following concerns:

Smell and noise due to the proximity of the proposed CFO – the respondents expressed concern about the smell and noise from the feedlot resulting in a reduced enjoyment of their property.

Approval officer’s (AO) response: Minimum distance separation (MDS) is an AOPA requirement that is designed to minimize nuisances such as smell, noise, dust, and flies from CFOs based on land zoning. According to Lethbridge County’s land use bylaw, the land surrounding NE 20-8-20 W4M is zoned ‘rural agricultural’ with five lots zoned ‘country residential’ to the west. The MDS required for 800 beef finishers, as proposed in the application, is 351 m for land zoned as agricultural (category 1) and 467 m for land zoned as country residential (category 2). As noted in section 6 of the decision summary, the proposed CFO meets the MDS requirements from nearby residences, with one exemption, the owner of that residence provided a MDS waiver. It is presumed that nuisance effects from a proposed CFO will be acceptable if the MDS has been met.

Some of the parties outside of the MDS may experience nuisance impacts and these impacts may not be trivial to those parties, however, the frequency of these exposures will likely be limited and of short duration. Complaints regarding smell and other nuisances can be reported to the NRCB’s 24-hour reporting line (1-866-383-6722) and will be followed up on by an NRCB inspector.

Groundwater contamination – the respondents expressed concern about the catch basin contents contaminating the water table.

AO response: The AOPA Standards and Administration Regulation (SAR) sets out hydraulic conductivity requirements for naturally occurring protective layers of manure collection areas

and manure storage facilities to prevent leakage and the contamination of groundwater. This requirement specifies that the hydraulic conductivity of a 5 metre thick naturally occurring protective layer for a catch basin must not be greater than 1.0×10^{-6} cm/s, and that the bottom of the protective layer must be at least 1m above the top of the uppermost groundwater resource. As noted in the soil investigation report provided by the applicant in Technical Document LA24045, the hydraulic conductivity meets this requirement and there is no evidence of a groundwater resource within the upper 9.2 m of the site (groundwater resource is defined in the SAR, differently from water table).

The engineer's soil investigation report suggested that a shallow water table may be present. The height of the water table can vary over time based upon the time of year, irrigation, or precipitation events. AOPA requires that facilities must meet a minimum of a one metre separation between the water table and the bottom of the manure collection area, at the time of construction. Based on this information and the concern, I have included conditions that require engineer supervision of the construction of the catch basins and for a report to be provided confirming the final dimensions and depths of the catch basins, that the water table was not observed to be one meter or less from the bottom of the catch basins at the time of construction, and that any moist or sloughing areas are over excavated and re-packed appropriately. There is also a condition requiring construction to cease immediately if the water table is observed to be one metre or less from the bottom of the catch basins at the time of construction.

Manure management and land application of manure – the respondents expressed concern about the management of manure, the land application of manure and catch basin contents, and the odour arising from these practices.

AO response: CFOs are required to have nine months of manure storage and sufficient catch basin volume to capture run-off from a 1-in-30 year rainfall. Manure management often involves stockpiling and the land application of manure and manure contaminated runoff (catch basin contents) for which applicants need to provide sufficient land for spreading. The proposed CFO meets these requirements as feedlot pens are considered to be nine months of manure storage, the proposed catch basins can accommodate the run-off from a 1-in-30 year rainfall, and the applicant has provided sufficient land base for spreading manure to prevent nutrient overloading, as noted in Technical Document LA24045. Operators must abide by stockpiling and land spreading regulations in AOPA, such as setbacks, incorporation after spreading, and not spreading on frozen or snow-covered ground.

These practices may result in odour and other nuisances, and these nuisance impacts may not be trivial to those parties, however, the frequency of these exposures will likely be limited and of short duration. Complaints regarding manure related issues can be reported to the NRCB's 24-hour reporting line (1-866-383-6722) and will be followed up on by an NRCB inspector.

Animal welfare – the respondents were concerned with the welfare of the animals at the proposed CFO, specifically health issues such as diabetes and foot rot.

AO response: Animal welfare is not within the jurisdiction of the NRCB and I am precluded from considering this as part of my review of the application. Animal welfare is the responsibility of the Food Safety and Animal Welfare Division of Alberta Agriculture and Irrigation (AGI), other agencies such as the SPCA, and livestock groups. Operators are responsible for the welfare of the livestock under their care and control. Animal welfare concerns should be directed to the appropriate regulatory body.

Disposal of dead animals – the respondents expressed concern about the disposal of dead animals, particularly about the smell.

AO response: The disposal of dead animals is not under the jurisdiction of the NRCB and I am precluded from considering this as part of my review of the application. Alberta Agriculture and Irrigation (AGI) has jurisdiction under the *Animal Health Act*. Concerns about dead animal disposal can be brought forward to AGI.

Road use and dust from agricultural traffic – the respondents expressed concern about the wear of roads and the dust produced by increased traffic.

AO response: The NRCB does not have direct responsibility for regulating road use. Section 18 of the *Municipal Government Act* gives counties “direction, control and management” of all roads within their borders. Because of this, it would be impractical and inefficient for the NRCB to attempt to manage road use through AOPA permits. (See Operational Policy 2016-7: *Approvals*, part 9.13)

Additionally, a copy of the application was sent to Transportation and Economic Corridors (TEC) for their review and comment and no response was received.

Health issues – the respondents expressed concern about health issues, particularly from chemical use for agricultural practices. They were also concerned how the chemical drift will affect their property and livestock

AO response: AOPA does not regulate the use of chemicals, for agriculture uses or otherwise, and is therefore not within the jurisdiction of the NRCB.

After receiving Hafichuk and Van Popta’s response stating health concerns, I sent a copy of the application and their response to Alberta Health Services (AHS) for review and comment (see section 9.12 of NRCB Operational Policy 2016-7: *Approvals*). In their response, AHS stated that AOPA requirements regarding manure storage, land application of manure, and MDS consider potential public health impacts and that MDS is within the jurisdiction of the NRCB.

As noted above and in Technical Document LA24045, the application meets MDS requirements, as well as groundwater and surface water protection requirements for manure collection area and manure storage facility liners, and provides sufficient land for spreading manure.

APPENDIX C: Explanation of conditions in Approval LA24045

Approval LA24045 includes several conditions, discussed below:

a. Construction above the water table

Sections 9(2) of the *Standards and Administration Regulation* under the *Agricultural Operation Practices Act* (AOPA) requires the bottom of the 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.”

It is noted in the subsoil investigation report included with the application that some soft and wet soils may be encountered in the upper 2 m and that this may require some areas to be sub-excavated, filled, and compacted (see page 24 of TD LA24045). The water table is approximately 1.5 m below grade and the bottom of the catch basins is proposed to be 2 m below grade.

Based on this information, the proposed west and east catch basins may not meet the one metre requirement of section 9(2). However, because the height of the water table can vary over time, the lack of adequate depth to water table indicated in Rose Niedermier's report does not mean that there will be an inadequate depth at the time of construction. To address this variability and ensure that the depth requirement is met at the time of construction, conditions are included requiring Rose Niedermier to cease construction and notify the NRCB immediately if the water table is encountered during construction, in addition to a construction completion report signed by an engineer confirming that the water table was not observed at the time of construction.

b. Groundwater protection requirements

Rose Niedermier proposes to construct the new catch basins with a 3.5 metre thick naturally occurring protective layer. Section 9 of AOPA's *Standards and Administration Regulation* specifies a maximum hydraulic conductivity for this type of protective layer in order to minimize leakage.

The hydraulic conductivity of the protective layer was measured by installing a monitoring well at the time of borehole drilling. This approach provides an adequate representation of the protective layer proposed to be used to protect the groundwater resource.

The regulations provide that the actual hydraulic conductivity of a 5 metre thick naturally occurring protective layer for a catch basin must not be greater than 1×10^{-6} cm/sec. In this case, the in-situ measurements for were 7.1×10^{-8} cm/s and 3.6×10^{-8} cm/s. These values are below the maximum value in the regulations. Therefore, the proposed naturally occurring protective layer exceeds the hydraulic conductivity requirement in the regulations.

To provide additional assurance that the as-built catch basins adequately protect groundwater, Approval LA24045 includes conditions requiring Rose Niedermier to provide an engineer's completion report certifying that the catch basins were constructed at the proposed locations with the proposed dimensions, and that any sandy areas in the catch basins were over excavated and re-packed using the same proposed material as detailed in the JLECS Geotechnical Review and Evaluation dated September 12, 2024.

c. Construction Deadline

Rose Niedermier proposes to complete construction of the proposed catch basins by December 2025. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of December 1, 2025 is included as a condition in Approval LA24045.

d. Post-construction inspection and review

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 LA24045 includes conditions stating that Rose Niedermier shall not place livestock or manure in the new portion of the east feedlot pen and shall not allow manure or manure contaminated run off to enter the east or west catch basins until NRCB personnel have inspected the feedlot pens and catch basins and confirmed in writing that they meet the approval requirements.