

Decision Summary LA21063

This document summarizes my reasons for issuing Approval LA21063 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA21063. 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 December 22, 2021, Leeuwenburgh Dairy Farms Ltd. (Leeuwenburgh) submitted a Part 1 application to the NRCB to expand an existing dairy CFO.

The Part 2 application was submitted on February 25, 2022. On March 8, 2022, I deemed the application complete.

The proposed expansion involves:

- Increasing livestock numbers from 100 to 250 milking cows (plus associated dries and replacements)
- Constructing a dairy barn - 92.0 m x 41.8 m (302 ft. x 137 ft.)
- Converting an old dugout to into an EMS – 69.5 m x 28.0 m x 5.8 m (228 ft. x 92 ft. x 19 ft.)

Leeuwenburgh also applied to amend a manure spreading condition which was included in Registration LA07037 (condition 4).

The applicant does not have 9 months of manure storage at their CFO site, however, they are proposing to utilize a liquid manure storage on a different land location to accommodate the additional manure that would be produced by the dairy. The dairy currently provides liquid manure to Lethbridge Biogas who collect the manure from the dairy and return an equal amount of digestate to the liquid manure storages at the dairy. The applicant is proposing to provide the additional manure to Lethbridge Biogas and have them deliver an equal amount of digestate to the liquid manure storage at the different location. The liquid manure storage at the different location has not yet been constructed.

In order for the dairy to meet the 9 month manure storage requirement, they will be required to provide proof to the NRCB, on an annual basis, that they have access to liquid manure storages which will accommodate the 9 month AOPA manure storage requirement. In addition they will also be required to provide proof that they have the ability to transport the manure from the dairy to the liquid manure storage sites. This proof must be acceptable to the NRCB and cover a minimum of one year following the date the report is provided to the NRCB.

a. Location

The existing CFO is located at NW 36-9-22 W4M in Lethbridge County, roughly 3.2 km north of the City of Lethbridge and 1.6 km south of the Hamlet of Diamond Springs, Alberta. The topography of the area is predominantly flat.

b. Existing permits

The CFO was originally permitted under development permit # 59-20, issued by Lethbridge County. The permit was issued upon an appeal on June 17, 1980, and allowed the operation of a 100 head dairy. In 2005, Leeuwenburgh applied to the NRCB to amend a manure spreading condition in development permit # 59-20 which was denied. In 2007, Registration LA07037 was issued, allowing the construction of an extension to the dairy barn and confirming the permitted animal numbers at this CFO as 100 milking cows (plus associated replacement and dries). The CFO's existing permitted facilities are listed in the appendix to this Approval LA21063.

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:

- the municipality where the CFO is located or is to be located
- 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 ½ mile. (The NRCB refers to this distance as the "affected party radius.")

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

The NRCB gave notice of the application by public advertisement in the Sunny South News on March 8, 2022. The full application was made available for viewing on the NRCB website for public viewing. As a courtesy, 17 letters were sent to people identified by Lethbridge County as owning or residing on land within the affected party radius.

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 Health Services (AHS), Alberta Environment and Parks (AEP), Alberta Agriculture, Forestry and Rural Economic Development (AFRED), Alberta Transportation (AT), and the Lethbridge Northern Irrigation District (LNID).

I also sent a copy of the application to Fortis Alberta Inc., and Atco Energy as they have Easements/Right of Ways on this property.

The NRCB received written responses from Michel Gervais, public health inspector with AHS, Jeff Gutsell, hydrogeologist with AEP; Leah Olson, development and planning technologist with AT; and Mr. Alan Harrold, general manager of the LNID.

Mr. Gervais, from AHS, noted that the proposed construction is within the MDS of a residence and commented that the MDS should be met.

Mr. Gutsell commented that there seems to be a water well (ID 281659) on this property which is not a licensed well. He reminded the operator that he is not authorized to divert water from this well. Apart from the fact that this well is not an actual well and is categorized as 'chemistry' in the AEP database, water licensing is not under the jurisdiction of the NRCB and I will therefore not discuss this issue further. Mr. Gutsell also requested Leeuwenburgh to submit proof that his water needs are met. The response was forwarded to Leeuwenburgh for their information and action.

Ms. Olson, with AT responded, stating that this development does not require a permit from her department and that they do not have any objections or concerns with this application.

Mr. Harrold, LNID, stated in his response that the CFO has a water conveyance agreement but will have to expand it in order to meet the needs of the expansion. He also reminded the operator to adhere to all applicable setbacks (construction and manure spreading) to all irrigation works.

No responses were received from Fortis Alberta Inc. or Atco Energy.

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 expansion 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 expansion:

- Meets the required AOPA setbacks from nearby residences, with two exceptions (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS). The owners of those residences have signed a written waiver of the MDS requirement to their residences
- Meets the required AOPA setbacks from water wells, springs, and common bodies of water

- Has sufficient means to control surface runoff of manure
- Does not meet AOPA's nine month liquid manure storage requirements. To address this, several conditions will be attached (see Appendix C below)
- Meets AOPA's nutrient management requirements regarding the land application of manure
- Meets AOPA groundwater protection requirements for the design of floors and liners/protective layers of manure storage facilities and manure collection areas

7. Responses from the 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 expansion is located within its boundaries.

Ms. Hilary Janzen, Supervisor of Planning and Development with Lethbridge County, provided a written response on behalf of Lethbridge County. Ms. Janzen stated that the application is consistent with Lethbridge County's land use provisions of the municipal development plan. The application's consistency with Lethbridge 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 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 6.2). Kevin and Anita Wickersham, and Herold and Laure Reid provided MDS waivers and are therefore considered to be directly affected parties.

Roy Swidinsky submitted a response to this application. He owns or resides on land within the 0.5 mile notification radius for affected persons. Because of this and because a response was submitted, he qualifies for directly affected party status. (See NRCB Operational Policy 2016-7: Approvals, part 6.2)

The directly affected party raised concerns regarding the available land base for manure spreading and arising nuisance issues, mainly odor, due to lack of sufficient land base. These concerns are addressed in Appendix B.

8. Environmental risk of CFO facilities

As part of my review of this application, I assessed the risk to the environment posed by the CFO's existing manure storage facilities and manure collection areas. I used the NRCB's environmental risk screening tool (ERST) to assist in my assessment of risk to surface water and groundwater (see NRCB Operational Policy 2016-7: Approvals, part 8.13). 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 CFO's existing concrete liquid manure storage and the calf pens using the ERST. These appear to be the CFO's highest risk facilities, because the concrete liquid manure pit is the deepest facility and the calf pens have the highest potential to contaminate surface water. The assessment found that both of these facilities pose a low potential risk to groundwater and surface water. Because these are considered 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. A further assessment of the risks posed by the other existing facilities, using the ERST, is therefore not necessary.

New CFO facilities which clearly meet or exceed AOPA requirements are automatically assumed to pose a low risk to surface and groundwater.

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

I have considered the effects the proposed MSF may have on natural resources administered by provincial departments.

To my knowledge, no statements of concern have been submitted under section 73 of the *Environmental Protection and Enhancement Act* / section 109 of the *Water Act* in respect of the subject of this application.

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 policy (Approvals Policy 8.7.3), I presumed that the effects in the environment are acceptable because the application meets all of AOPA's technical requirements with the conditions attached. In my view, this presumption is not rebutted.

Consistent with NRCB policy (Approvals Policy 8.7.3), 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 8.7.3.). In my view, this presumption is not rebutted.

10. Terms and conditions

Approval LA21063 specifies the cumulative permitted livestock capacity as 250 milking cows (plus associated dries and replacements) and permits the construction of the dairy barn and conversion of the dugout into an EMS.

Approval LA21063 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 LA21063 includes conditions that generally address construction deadlines, document submission, and construction inspection. For an explanation of the reasons for these conditions, see Appendix C.

For clarity, and pursuant to NRCB policy, I consolidated the following permits with Approval LA21063: Development permit #59-20, and NRCB issued Registration LA07037 (see NRCB Operational Policy 2016-7: Approvals, part 10.5). Permit consolidation helps the permit holder, municipality, neighbors 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 C discusses which conditions from the historical permits are or are not carried forward into the new approval.

11. Conclusion

Approval LA21063 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA21063.

Leeuwenburgh's deemed development permit #59-20, and NRCB issued Registration LA07037 are therefore superseded, and their content consolidated into this Approval LA21063, unless Approval LA21063 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Development permit #59-20, and NRCB issued Registration LA07037 will remain in effect.

April 26, 2022

(Original signed)
Carina Weisbach
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Determining directly affected party status and concerns raised
- C. Explanation of conditions in Approval LA21063

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.

Conversely, “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 8.2.5.)

Leeuwenburgh’s 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 December 5, 2019, under Bylaw #19-043.

Section 6.6 Confined Feeding Operations lists several policies under subsection 6.6.3:

a) Urban Fringe: *“The County shall exclude the development of CFOs in the Urban Fringe land use districts.”*

The CFO is not within this zoning category as shown on Map 11B.

b) Impacts

This policy refers to lobbying for funding to counteract the impact of CFOs on county infrastructure. Municipal funding is not under the jurisdiction of the NRCB. Therefore, I will not include this policy in my MDP consistency determination.

c) Location

The three listed items under this policy section refer to a reciprocal MDP for residential development in the vicinity of CFOs. Development permits for residential development are under the jurisdiction of the respective municipality. Therefore, I will not discuss this policy any further.

d) NRCB

I) Given the County’s unique perspective regarding CFOs, the county will be proactive when discussing regulation amendments regarding CFOs with Alberta’s NRCB.

This policy is likely not a land use provision but rather a ‘mode of action’. I will therefore not discuss this policy in any more detail.

II) The NRCB in its approval review should also consider:

- *The cumulative effect of a new approval on any area new other existing confined feeding operations*

- *Environmentally sensitive areas as shown in the report, County of Lethbridge: Environmentally Sensitive areas in the Oldman River Region (see maps in Appendix C)*
- *Giving notice to adjacent landowners even in the case of applications for registration or authorizations, and*
- *Applying MDS calculations to all county residential clusters whether or not designated in the land use bylaw.*

The first of these four considerations is likely not a land use provision because of its project-specific focus (viewed cumulatively with other existing CFOs), and its request for the NRCB to make a discretionary judgement about the degree of cumulative effects that are acceptable. Therefore, this consideration is not relevant to my MDP consistency determination. (See Operational Policy 2016-7: *Approvals*, part 8.2.5.)

As for the second consideration, this provision is likely not a land use provision because of its referral to a specific site. However, I considered it in respect to the CFOs impact on the environment as discussed in section eight above. At any rate, the CFO is not located close to any of the environmentally significant areas noted in the county's report.

The third of these four considerations is likely not a land use provision because it requests notification to adjacent landowners about registration and authorization applications. Sections 19 and 21 of AOPA determine the required notification process. In this case, the application was for an approval which triggered public notification requirements under AOPA.

The fourth consideration appears to refer to AOPA's "minimum distance separation" (MDS) requirements. Under NRCB policy, approval officers should not consider MDP provisions that rely on or change the MDS formulas or MDS requirements under AOPA. (See also Operational Policy 2016-7: *Approvals*, part 8.2.5.) At any rate, there are no country residential clusters in the immediate vicinity of the CFO, so this MDP consideration does not apply to Leeuwenburgh's application.

III) The NRCB is requested to take into consideration the requirements and policies of the County Council when making decision on such applications.

This provision is likely not a land use provision because it requests the consideration of policies and requirements of the county's council. AOPA is very specific in what approval officers must consider when determining consistency with the MDP (section 22(1)) and only refers to the MDP document. It is implied that this also includes any planning documents that are directly incorporated into the MDP. At any rate, the deemed application was sent to Lethbridge County for their input.

IV) CFOs "shall not be approved in the areas shown and designated on Figure 11B as exclusion areas".

Leeuwenburgh's CFO is not located in any of the designated CFO exclusion areas, so the application is consistent with this provision.

V) CFOs "shall not be approved on parcels less than 64.7 hectares (160 acres) or an unsubdivided quarter section, having a minimum of 4.0 hectares (10 acres) of registered exceptions of rights-of-way"

This provision is likely not a land use provision because it refers to specifics with respect to a site of a CFO, rather than the use of a specific land.

VI) The NRCB should consider the requirements and regulations as stipulated in the Lethbridge County Land Use Bylaw and Animal Control Bylaw, including the exclusion of confined feeding operations on parcels less than the specified sizes as specified in those bylaws.

In my view, this section provides a clear intent to adopt provisions from the land use bylaw (LUB). Following the NRCB Operational Policy 2016-7: *Approvals*, part 8.2.3, I therefore also considered Lethbridge County's Land Use Bylaw #1404 (consolidated to Bylaw 19-044 and Bylaw 19-032 (maps)). Under those bylaws, the subject land is currently zoned Rural Agriculture. CFOs are a discretionary use under this zoning category.

As stated in Part 2 (RA) section 3(3) in this bylaw, the minimum parcel size for CFOs is 64.7 hectares (160 acres).

This provision is the same as section 6.6.3 (IV) in the MDP. Hence, I will look at it in a similar manner as the MDP provision.

The subsequent sections (Rural Agriculture) in this land use bylaw, require minimum setbacks (sections 4 to 7). These include setbacks to property lines, roadways, canals and distance to neighbouring residences (section 6(6)). Apart from the MDS requirement which has been discussed previously, these requirements could be defined as being 'siting' requirements and would subsequently be exempt from consideration by an approval officer. Nevertheless, I am of the opinion that they ensure proper development of the rural areas in respect to future development and hence dictate a land use or are related to safety issues and will therefore be considered as impact on the community. At any rate, the already constructed facilities meet these setbacks.

The above subsection of the MDP also seems to clearly incorporate the Animal Control Bylaw (Bylaw17-008). Given that this is not a land use provision and the application is for a CFO that triggered an application process under AOPA and therefore falls under the jurisdiction of the NRCB, I determined that the animal control bylaw does not apply under this circumstance.

e) Development Setbacks

This provision requires CFO developments to meet the setbacks to roadways and property lines as set out in the LUB.

The development meets all of these setbacks.

I therefore conclude that this application is consistent with Lethbridge County's MDP, a conclusion that is supported by the comments provided by Lethbridge County's development officer.

APPENDIX B: Determining directly affected party status and concerns raised

The following individuals qualify for directly affected party status because they own a residence within the minimum distance separation (MDS) and waived the MDS requirement in writing: Kevin and Anita Wickersham, and Harold and Laura Reid. See NRCB Operational Policy 2016:7 – Approvals, part 6.2

The following individual qualifies for directly affected party status because he submitted a response to the application and owns or resides on land within the “affected party radius,” as specified in section 5(c) of the Agricultural Operation, Part 2 Matters Regulation: Roy Swidinsky. See NRCB Operational Policy 2016:7 – Approvals, part 6.2.

The directly affected party raised concerns regarding the available land base for manure spreading and arising nuisance issues, mainly odor, due to lack of sufficient land base. He also commented that the original permit was for 50 dairy cows due to lack of sufficient land base.

Development permit 59-20 allowed the establishment of a 100 head dairy. Condition 4 in the development permit restricted the spreading of manure on the home quarter (NW 36-9-22 W4) and required Leeuwenburgh to obtain manure spreading agreements from other land owners to allow them to spread manure on their land.

However, since that time, the land base owned by Leeuwenburgh has increased and the land base requirements for this application under AOPA have been met.

Also, as noted below, Leeuwenburgh has an agreement with Lethbridge Biogas for the pick-up of manure from their dairy. The agreement allows Lethbridge Biogas to transport the equivalent amount of digestate from the Biogas facility to other lands, also owned by Leeuwenburgh, located south of the city of Lethbridge (NE 8-8-20 W4). This will further reduce potential nuisance impacts on the neighbouring residences in the Diamond City and Park Lake area that could be created by this CFO during manure spreading events. Leeuwenburgh has submitted a Part 1 application for a new earthen liquid manure storage on the NE 8-8-20 W4. However, a Part 2 has not been received to date.

APPENDIX C: Explanation of conditions in Approval LA21063

Approval LA21063 includes several conditions, discussed below, and carries forward a number of conditions from development permit #59-20, and NRCB issued Registration LA07037 (see sections 2 and 3 of this appendix). Construction conditions from development permit #59-20 and Registration LA07037 that have been met are in the appendix to Approval LA21063.

1. New conditions in Approval LA21063

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 dairy barn might not meet the one metre requirement of section 9(2) for concrete liners. However, because the height of the water table can vary over time, and seems to be localized in the south of the site, the lack of adequate depth to water table indicated in Leeuwenburgh'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, a condition is included requiring Leeuwenburgh to cease construction and notify the NRCB immediately if the water table is encountered during construction.

b. Construction deadline

Leeuwenburgh proposes to complete construction of the proposed new dairy barn and convert the fresh water lagoon into an EMS by January 30, 2023. This time-frame is considered to be reasonable for the proposed scope of work. The deadline of January 30, 2023 is included as a condition in Approval LA21063.

c. Manure storage requirements

Leeuwenburgh proposed the expansion from 100 to 250 milking cows (plus dries and replacements) which increases their nine month storage requirements for liquid manure from 2,700 m³ to 6,750 m³. All solid manure will be either stored within the pen areas or using short term manure storage. With the conversion of the old dugout into an EMS (earthen liquid manure storage), the CFO will have an available liquid manure storage capacity of 3,696 m³ (including the in-barn storage and concrete pit). This is about 50% of the required nine month storage volume under AOPA and its regulations.

To address this deficiency, Leeuwenburgh provided a copy of an agreement they have with Lethbridge Biogas for manure pick-up from the CFO. The agreement specifies that manure will be picked up daily from the CFO. The plan is that digestate (the end product following the bio-digestion process) from Lethbridge Biogas will either be delivered back to the EMS at the CFO or to a different, alternate location. This location is proposed to be on the NE 8-8-20 W4M, south of the City of Lethbridge. This land is currently owned by Leeuwenburgh Dairy and is close to other manure spreading lands which are also currently owned by Leeuwenburgh.

Therefore, to meet the AOPA nine month storage requirement it is imperative that the CFO has and maintains the following:

- a) Access to a constructed, permitted, liquid manure storage facility(s), which has (-ve) been approved for use, with a minimum combined capacity of 6,750 m³ prior to the expansion of the dairy occurring with proof of access to be provided to the NRCB annually valid for the year following the date of the report; and
- b) Means of transporting liquid manure to all of the liquid manure storage facility(s) including any which may be located at a different land location from the CFO.

It is therefore necessary to include the following conditions to ensure that Leeuwenburgh can meet the nine month storage requirements. These conditions will require Leeuwenburgh to do the following:

- Provide and maintain proof of access to permitted, constructed liquid manure storage facility(s), which have been approved for use, with a total capacity of at least 6,750 m³ prior to being allowed to increase milking cow numbers at the CFO site (NW 36-9-22 W4M).
- Proof of access shall be provided annually and has to be valid for the year following the date of the report
- Provide and maintain proof of the ability to transport manure from the CFO to the off-site liquid manure storage facility(s)
- Immediately notify the NRCB should access to the off-site liquid manure storage facility(s) or ability to transport manure cease.

Loss of access to the required liquid manure storage capacity to meet the nine month manure storage requirements set out in AOPA and its regulations will result in an adjustment to the permitted animal numbers at this CFO.

d. 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 LA21063 includes conditions requiring:

- a. the concrete used to construct the liner of the manure collection and storage portion of the dairy barn to meet the specification for category B (liquid manure shallow pits); in Technical Guideline Agdex 096-93 "Non-Engineered Concrete Liners for Manure Collection and Storage Areas."
- b. Leeuwenburgh to provide evidence or written confirmation from a qualified third party that the concrete used for the manure collection and storage area meets the required specifications including location; the specifications of the concrete used; the thickness of the concrete walls and floor; the type of water stop; and, the size and spacing of reinforcement.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, and to reduce risk to the operator, these inspections must occur before livestock or manure are placed in the newly constructed facilities. Approval LA21063 includes a condition stating that Leeuwenburgh shall not place livestock or manure in the manure storage or collection portions of the new dairy barn until NRCB personnel have inspected the dairy barn and confirmed in writing that it meets the approval requirements.

2. Conditions not carried forward from development permit #59-20 and Registration LA07030

Approval LA21063 includes all terms and conditions in development permit #59-20 and NRCB issued Registration LA07037, except condition 4 which is identical in both permits as noted below.

Pursuant to section 23 of AOPA (approval officer amendments), I have determined that condition #3 from development permit #59-20 and condition #4 from Registration LA07037 should be revised and are therefore not carried forward to Approval LA21063 as written.

Condition 4 states:” The animal wastes shall be removed from the operation in keeping with sound waste management practices as prescribed by Alberta Environment and the Barons Eureka Health Unit. The manure shall not be spread on the property on which the dairy operation is located and further, the Developer/owner shall provide to the County of Lethbridge No. 26 written permission form two (2) farm holdings to spread that said manure on their respective property.

My reasons for revising this condition are:

In an email, Leeuwenburgh requested to amend this condition to allow spreading on the ‘home quarter’ (NW 36-9-22 W4). The home quarter as well as the next quarter (NE 36-9-22, owned by the LNID) border the coulee system of the Oldman River to the west. This area has no residences. With the predominant wind direction coming from the southwest-west (Windfinder.com) and enough land base (See Technical Document LA21063) to spread the manure produced at this CFO, I am on the opinion that this condition can be removed. In addition, Leeuwenburgh has an agreement with Lethbridge Biogas for pick-up of manure. The manure will be converted into digestate and will either be transported back to the dairy or to other lands, currently owned by Leeuwenburgh, south of the city of Lethbridge (NE 8-8-20 W4). This will further reduce potential nuisance impacts on the neighbouring residences in the Diamond City and Park Lake areas that could be created by this CFO during manure spreading events.

This condition will be replaced by the condition stated in the opening paragraph of this permit that says that the permit holder shall adhere to AOPA and its regulations. In this case I would draw particular attention to sections 23-27 of the Standards and Administration Regulation that lay out manure application limits, setbacks, soil protection, and record keeping.