

Decision Summary LA20038

This document summarizes my reasons for issuing Authorization LA20038 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document LA20038. 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.

1. Background

On September 9, 2020, Van Haarst Farms Ltd. submitted a Part 1 application to the NRCB to expand an existing earthen manure storage 3.1 m (10 ft.) wider on its east side (total EMS dimensions 70 m x 33.1 m x 5 m deep) at an existing swine CFO. The Part 2 application was submitted on September 28, 2020 and I deemed the application complete the same day.

The purpose of the proposed expansion to the existing earthen manure storage is to allow for more holding capacity which should increase the operator's flexibility around the timing of manure spreading.

There is no proposed increase in livestock.

Under AOPA, this type of application requires an authorization. (This is one of several types of "permits" issued under AOPA. For an explanation of the different types and when each one applies, see www.nrcb.ca.)

a. Location

The existing CFO is located at NE 8-10-15 W4M in the Municipal District (MD) of Taber, roughly eight km east of the Town of Taber, Alberta. The CFO site slopes gently toward the north.

b. Existing permitted facilities.

The CFO was permitted by the Municipal District of Taber on April 22, 1998, under development permit #35-98. This development permit is part of a deemed (i.e. grandfathered) permit under section 18.1(1)(b) of AOPA.

Since AOPA came into effect on Jan. 1, 2002, the NRCB has issued the CFO several authorizations, three of which—LA17018, LA16032 and LA02003B—are still in effect. Collectively, the NRCB-issued authorizations and the deemed permit allow the construction and operation of a 350 sow farrow to finish CFO. The CFO's deemed and NRCB-permitted facilities are listed the appendix to Authorization LA16032. (See Technical Document LA16032 for a determination of the CFO's deemed facilities and capacity).

2. Notices to affected parties

Under section 21 of AOPA, notice of an authorization application must be provided to municipalities that are “affected” by the application. Section 5 of AOPA’s Part 2 Matters Regulation lists the categories of municipalities that are affected parties. These categories include the municipality where the existing CFO is located. Under section 21(2) of the act, all affected municipalities are automatically also “directly affected” parties. The NRCB interprets section 21(3) as allowing affected municipalities to provide written submissions regarding whether the application meets the requirements of the regulations under the act. (See Operational Policy 2016-7: *Approvals*, part 7.11.2.)

The MD of Taber is both an affected and directly affected party because the proposed expansion is located within its boundaries.

On September 28, 2020, the NRCB emailed referral letters and a copy of the application to the MD of Taber; Alberta Health Services (AHS); Alberta Environment and Parks (AEP); Alberta Transportation; and the Taber Irrigation District.

3. Responses from the municipality and referral agencies

I received responses from MD of Taber, AHS, AEP, Alberta Transportation and the Taber Irrigation District.

Mr. Kirk Hughes, director of planning & economic development provided a written response on behalf of the MD of Taber. As noted in section 2, the MD of Taber is a directly affected party.

Mr. Hughes stated that the application is consistent with the MD of Taber’s municipal development plan and the CFO appears to be located outside of the confined feeding operations restricted area as defined by the MDP. It was also noted that the CFO is not affected by any other area structure plans or intermunicipal development plans. The application’s consistency with the municipal development plan is addressed in Appendix A, attached.

Mr. Hughes also stated the application meets the setbacks required by the MD of Taber’s land use bylaw (LUB) and noted that the application meets these setbacks.

The NRCB received a written response to the application notice from Ting Lo, a public health inspector on behalf of AHS stating that AHS has no objections to the application.

The NRCB received an emailed response from Leah Olsen, a development/planning technologist on behalf of Alberta Transportation. In Ms. Olsen’s response, she stated that a permit is not required from his department and that the construction would not have any appreciable impact on the provincial highway network.

Mr. Jeff Gutsell, hydrogeologist with AEP stated that no additional water is required since this application is for an expansion of the earthen manure storage with no additional animal numbers.

Mr. Christopher Galiagher, district manager with Taber Irrigation District responded saying they had no objection to the proposed application.

4. Environmental risk screening of existing and proposed facilities

When reviewing a new permit application for an existing CFO, NRCB approval officers normally assess the CFO's existing buildings, structures, and other facilities, using the NRCB's environmental risk screening tool to determine the level of risk they pose to surface water and groundwater. This tool provides for a numeric scoring of risks, which can fall within either a low, moderate, or high risk range. (A complete description of this tool is available under CFO/Groundwater and Surface Water Protection on the NRCB website at www.nrcb.ca.) However, if those risks have previously been assessed, the approval officer will not conduct a new assessment unless site changes are identified that require a new assessment, or the assessment was done with a previous version of the risk screening tool and requires updating. See NRCB Operational Policy 2016-7: *Approvals*, part 8.13.

In this case, the risks posed by Van Haarst Farms' existing CFO facilities were assessed in 2016 and 2017. According to those assessments, the manure storage facilities and manure collection areas posed a low risk to surface water and groundwater.

The circumstances have not changed since those assessments were done. As a result, a new assessment of the risks posed by the CFO's existing facilities is not required.

I also assessed the EMS, using the NRCB's risk screening tool, and determined that it poses a low risk to groundwater and surface water.

5. Other factors considered

The application meets all relevant AOPA requirements, with the terms and conditions summarized in part 6.

In addition, the proposed expansion to the existing earthen manure storage is consistent with the land use provisions of the MD of Taber's municipal development plan. (See Appendix A for a more detailed discussion of the county's planning requirements.)

With respect to the act's technical requirements, the proposed expansion to the existing earthen manure storage:

- Meets the required AOPA setbacks from all nearby residences (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS)
- Meets the required AOPA setbacks from water wells, springs and common bodies of water
- Has sufficient means to control surface runoff of manure
- Meets AOPA groundwater protection requirements for the design of floors and liners of manure storage facilities

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.

6. Terms and conditions

Authorization LA20038 permits the expansion to the existing earthen manure storage.

Authorization LA20038 also contains terms that the NRCB generally includes in all AOPA authorizations, including terms stating that the applicant must follow AOPA requirements and must adhere to the project descriptions in their application and accompanying materials.

In addition to the terms described above, Authorization LA20038 includes conditions that:

- Set a deadline of November 30, 2023 for the approved construction to be completed
- Prohibit Van Haarst Farms from placing manure in the expanded portion of the earthen manure storage until the expanded portion of the facility has been inspected by the NRCB following its construction
- Require Van Haarst Farms to abide by the provided engineering report if any sand lenses are encountered during construction, and to immediately cease construction and contact the NRCB if the water table is encountered during construction.

For an explanation of the reasons for these conditions, see Appendix B.

7. Conclusion

Authorization LA20038 is issued for the reasons provided above, in the attached appendices, and in Technical Document LA20038.

Authorization LA20038 should be read in conjunction with previously issued NRCB Authorizations LA17018, LA16032, LA02003B, and Van Haarst Farm's deemed permit (including development permit 35-98), which remain in effect.

November 19, 2020

(Original signed)
Joe Sonnenberg
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Explanation of conditions in Authorization LA20038

APPENDIX A: Consistency with the municipal development plan

Under section 22 of AOPA, an approval officer may approve an application for an authorization only if the approval officer finds that the application is consistent with the “land use provisions” of the applicable municipal development plan (MDP).

The NRCB interprets the term “land use provisions” as covering MDP policies that provide generic directions about the acceptability of various land uses in specific areas and that do not call for discretionary judgements relating to the acceptability of a given confined feeding operation (CFO) development. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.2.5.) Under this interpretation, the term “land use provisions” also excludes MDP policies that impose procedural requirements. In addition, section 22(2.1) of the act precludes approval officers from considering MDP provisions “respecting tests or conditions related to the construction of or the site” of a CFO or manure storage facility, or regarding the land application of manure. (These types of MDP provisions are commonly referred to as MDP “tests or conditions.”)

Van Haarst Farms’s CFO is located in the MD of Taber and is therefore subject to that county’s MDP. The MD of Taber adopted the latest revision to this plan in August 2019, under Bylaw #1951.

Sections 5.1.13-5.1.15 of the MDP provide policies “related to confined feeding operations.” The stated purposes of these policies include providing the NRCB with “requirements that the council of the MD of Taber wish to have considered when applications for CFOs are evaluated for approval....”

Neither this introductory text, nor the text in sections 5.1.13, are clear as to whether these policies were intended to apply to applications for both new CFOs and for expansions of existing CFOs. However, a broad reading of these provisions suggests that they were meant to cover new CFOs as well as CFO expansions. The MD director of planning & economic development’s response to this application impliedly supports this interpretation. Therefore, I presume these sections apply to Van Haarst Farms’ construction.

Policy 5.1.13 states that CFOs should be discouraged in the areas shown in Map 2 as “restricted”. Van Haarst Farms’ CFO is not within any of the “restricted” areas in Map 2.

Policy 5.1.14 lists four setbacks for new or expanded CFOs in relation to roads and property lines. Van Haarst Farms’ CFO is not within any of these setbacks.

Under policy 5.1.15, the municipal district requests that the NRCB consider the four following items:

- (a) the proximity of the operation to open bodies of water and the topography of the surrounding lands in order to minimize any negative impacts to drinking water supplies;
- (b) the cumulative effect of a new approval on any area near other existing confined feeding operations;
- (c) environmentally sensitive areas shown in the report, Municipal District of Taber Environmentally Sensitive Areas in the Oldman River Region;

(d) give[ing] notice to adjacent landowners even in the case of applications for registration or authorization.

Neither (a), (b) or (c) are likely “land use provisions,” as they call for site-specific judgements about the acceptability of an individual operation in light of certain criteria (“proximity,” magnitude and nature of cumulative effect, effect on environmentally sensitive areas). As such, these three MDP policies are not relevant to my MDP consistency determination. (See Operational Policy 2016-7: Approvals, part 8.2.5.). Even if (a) and (c) are relevant, Van Haarst Farms’ proposed facility is consistent with them, as discussed below.

Item (a) refers to the impact of the operation on drinking water supplies. Several of the requirements under AOPA and its regulations are designed to prevent or minimize leakage from CFO facilities and thus to prevent manure from reaching and contaminating surface water and groundwater. Because Van Haarst Farms’ proposed expansion to the existing earthen manure storage meets these requirements, this facility will not pose a material risk to surface water or groundwater (and therefore potential drinking water supplies).

The CFO is not located in an environmentally sensitive area as indicated in item (c) above.

Policy 5.1.15(d) is a procedural requirement so it also is likely not a “land use provision.” Therefore it is not relevant to my MDP consistency determination. At any rate, as explained above, the NRCB did notify the Municipal District of Taber and several referral agencies (see also Operational Policy 2016-7: *Approvals*, part 7.4). The notification requirements under AOPA have been met.

For these reasons, I conclude that the proposed expansion to the existing earthen manure storage is consistent with the land use provisions of the Municipal District of Taber’s MDP. The municipal district’s response to this application supports my conclusion.

Under the Municipal District of Taber’s Land Use Bylaw (LUB) #1944, the subject land is currently zoned as Rural Agricultural. The MDP does not specifically list CFOs as a permitted or discretionary use under this section. Ordinarily, a land use bylaw intends to preclude land uses that are not-listed as permitted or discretionary (and that do not meet any other relevant criteria). CFO developments are discussed throughout the LUB and under Schedule 3 are listed as not requiring a development permit. I interpret this LUB’s omission of CFOs as simply a reflection of the county’s recognition that, since AOPA came into effect in 2002, the NRCB is responsible for permitting CFOs.

APPENDIX B: Explanation of conditions in Authorization LA20038

Authorization LA20038 includes several conditions, discussed below:

a. Construction above the water table

Section (3) of the Standards and Administration Regulation under the *Agricultural Operation Practices Act* (AOPA) prohibit construction of a manure storage facility if its bottom is less than one metre above the water table at the site “at the time of construction.”

Based on this information, the proposed expansion to the existing earthen manure storage may not meet the one metre requirement of sections 9(3). However, because the height of the water table can vary over time, the lack of adequate depth to water table indicated in Van Haarst Farms'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 applicant to cease construction and notify the NRCB immediately if the water table is encountered during construction.

b. Groundwater protection requirements

Van Haarst Farms proposes to expand the existing earthen manure storage with 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.

Van Haarst Farms measured the hydraulic conductivity of the protective layer by installing a monitoring well (or water table well) at the time of borehole drilling. This approach provides an adequate representation of the protective layers proposed to be used to protect the groundwater resource.

The regulations provide that the actual hydraulic conductivity of a 10 metre thick naturally occurring protective layer must not be more than 1×10^{-6} cm/sec.

In this case, the in situ measurement was 5.6×10^{-8} cm/sec. This value is below the maximum value in the regulations. Therefore, the proposed naturally occurring protective layer meets the hydraulic conductivity requirement in the regulations.

The engineering report did indicate that sand lenses may be encountered at the site. To provide additional assurance that the as-built expansion to the existing earthen manure storage adequately protects groundwater, Authorization LA20038 includes a condition requiring Van Haarst Farms to provide confirmation prepared by a qualified professional that any sand lenses are over excavated and re-compacted in accordance with the engineer recommendations provided in TD LA20038.

c. Construction Deadline

Van Haarst Farms proposes to complete construction of the expansion to the existing earthen manure storage by November 1, 2020. This time-frame is unrealistic for the proposed scope of work. The deadline of November 30, 2023 is included as a condition in Authorization LA20038.

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.

The NRCB routinely inspects newly constructed facilities to assess whether the facilities were constructed according to their required design specifications. To be effective, these inspections must occur before manure is placed in the newly expanded portion of the earthen manure storage. Authorization LA20038 includes a condition stating that Van Haarst Farms shall not place manure in the newly expanded portion of the earthen manure storage until NRCB personnel have inspected the expanded portion of the facility and confirmed in writing that it meets the authorization requirements.