

Decision Summary RA18082

This document summarizes my reasons for issuing Approval RA18082 under the *Agricultural Operation Practices Act* (AOPA). Additional reasons are in Technical Document RA18082. That document and the full application are available from the decisions search engine on the Natural Resources Conservation Board (NRCB) website at www.nrcb.ca. 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 November 7, 2018, Chicken Hill Farms Ltd. submitted a Part 1 application to the NRCB to expand an existing poultry confined feeding operation (CFO), and to obtain a permit to continue using a previously converted broiler barn (the facility was originally built as a RV storage). The Part 2 application was submitted on November 27, 2018. On December 20, 2018, I deemed the application complete.

The proposed expansion involves:

- Increasing livestock numbers from 59,000 to 60,000 chicken broilers
- Obtaining a permit to continue using the previously converted broiler barn (referred as barn #4) (76.2 metres x 12.2 metres)

The application is the subject of a compliance directive (CD 18-03), which the NRCB issued to Chicken Hill Farms Ltd. on May 25, 2018, as stated in the directive, Chicken Hill Farms Ltd. had modified an existing ancillary storage building and converted it to a broiler barn, without obtaining an AOPA permit.

The directive directed Chicken Hill Farms Ltd. to take all necessary and appropriate measures to comply with AOPA and its regulations, with respect to the unauthorized conversion of a CFO facility.

As part of the application, Chicken Hill Farms Ltd. requested a variance to the water well setback under section 17 of the Act (see appendix C).

Under AOPA, this type of application requires an approval. (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 SW 22-40-28 W4M in Lacombe County, roughly 5.4 km southeast of Bentley, Alberta. The terrain is undulating with a general slope towards Gull Lake, located 830 metres to the north.

b. Existing permitted facilities

The CFO was originally permitted by Lacombe County development permits #143-94 and #133-98. Since AOPA came into effect on January 1, 2002, the NRCB issued the CFO grandfathering determination PR18001 on May 25, 2018. Collectively, these development permits and the

NRCB determination allowed Chicken Hill Farms Ltd. to construct and operate a 59,000 chicken broiler CFO, with three broiler poultry barns and an ancillary storage building. (The CFO's grandfathered status is explained in the decision for PR18001, issued by the NRCB compliance division)

2. Notices to affected parties

Under section 19 of AOPA, the NRCB is required to notify (or direct 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 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 individuals who own or reside on land within a specified distance from the CFO, depending on the size of the CFO

For this application, the distance is 0.5 mile. (The NRCB refers to this distance as the "affected party radius.")

Municipalities that are affected parties are defined by the act to be "directly affected" and are entitled to provide evidence and written submissions. Lacombe County is an affected party (and therefore also a directly affected party) because the CFO is located within its boundaries.

All other parties who receive notice of the application may request to be considered "directly affected." Under NRCB policy, all individuals who own or reside on land within the affected party radius are presumed to be "directly affected" if they submit a written response to the notice within the prescribed timeline. (See NRCB Operational Policy 2016-7: *Approvals*, part 6.2.)

Under section 20 of the act, all directly affected parties are entitled to a reasonable opportunity to provide evidence and written submissions regarding the application.

All directly affected parties are also entitled to request an NRCB board review of the approval officer's decision on the approval application.

The NRCB published notice of the application in the Central Alberta Life newspaper on December 20, 2018 and posted the full application on the NRCB website for public viewing. The NRCB also emailed referral letters and a copy of the complete application to Lacombe County, Alberta Health Services (AHS), Alberta Environment and Parks (AEP), and Alberta Transportation (AT). One hundred and ten courtesy letters were sent to people identified by Lacombe County as owning or residing on land within the affected party radius.

3. Responses from the municipality and referral agencies

I received responses from the county, AHS, AEP, and AT.

Ms. Cajun Paradis, a planner/development officer with Lacombe County, provided a written response on behalf of the county. As noted in section 2, Lacombe County is a directly affected party.

Ms. Paradis stated that the application is consistent with Lacombe County's municipal development plan (MDP). The application's consistency with Lacombe County's MDP is

addressed in Appendix A, attached.

The NRCB received a response from an environmental health officer on behalf of AHS, providing a couple of recommendations about the timing and manner of manure application. The environmental health officer concluded the letter indicating that the agency has no objections to this application.

A water administrator technologist at AEP stated that Chicken Hill Farms Ltd. does not require additional water licensing at this time.

A development and planning technologist indicated that AT has issued a permit.

4. Responses from other directly affected parties

The NRCB received a response from one individual. Ms. Marilee Yakunin (SE 21-40-28 W4M), who owns or resides on land within the 0.5 mile radius for affected persons. Because of her location within this radius, she is presumed to be directly affected by the application.

The directly affected party raised concerns regarding:

- Inhumane treatment of birds
- Odours from the barns
- Odours from manure spreading
- Size of operation keeps increasing
- Groundwater quality
- Surface water (Gull Lake) quality

These concerns are addressed in Appendix B.

5. Environmental risk screening of existing and proposed facilities

As part of my review of this application, I assessed the risk to surface water and groundwater posed by the CFO's existing, and the already built, manure storage facilities. I used the NRCB's environmental risk screening tool for this purpose (see NRCB Operational Policy 2016-7: *Approvals*, part 8.13). The 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/Guides on the NRCB website at www.nrcb.ca.)

All of the CFO's existing, including the already built, facilities pose a low potential risk to groundwater and surface water.

6. Other factors considered

The application meets all relevant AOPA requirements, with the terms and conditions summarized in part 7.¹

In addition, the proposed CFO expansion and modification is consistent with the land use

1. For a summary of these requirements, please see the [2008 AOPA Reference Guide](http://www.nrcb.ca/Guides), available on the NRCB website at www.nrcb.ca/Guides.

provisions of Lacombe County'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 CFO expansion and modification:

- Meets the required AOPA setbacks from all nearby residences (AOPA setbacks are known as the "minimum distance separation" requirements, or MDS), by applying an expansion factor under Schedule 1 of the Standard and Administration Regulation
- 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

I also determined that the previously converted broiler barn #4, which was constructed/converted without a permit, is located within the required AOPA setback from an existing water well. However, as explained in Appendix C, I am prepared to issue a variance to the 100 metre water well setback due to the well's construction and location upslope from barn #4.

In addition, I assessed the effects of the proposed CFO expansion/modification on the environment. Consistent with NRCB policy, I determined that these effects are acceptable because the application meets all of AOPA's technical requirements. I have carefully considered the concerns raised by the directly affected party, and in my view, those concerns have been adequately addressed by the application and conditions. I also determined that the application's effects on the economy and community are acceptable, and that the proposed CFO expansion/modification is an appropriate use of land. Under NRCB policy, these determinations are based on the application's consistency with the municipal development plan. (See NRCB Operational Policy 2016-7: *Approvals*, part 8.2.)

7. Terms and conditions

Approval RA18082 specifies the new permitted livestock capacity as 60,000 chicken broilers, and permits the continued use of the already converted broiler barn #4.

Approval RA18082 also 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.

a. Conditions carried forward from previously issued permits

For clarity, and pursuant to NRCB policy, I consolidated previously issued Lacombe County development permits #143-94 and #133-98, with Approval RA18082 (see NRCB Operational Policy 2016-7: *Approvals*, part 10.5). 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, and then cancelling all existing permits once the new permit is issued. This consolidation is carried out under section 23 of AOPA, which enables approval officers to amend AOPA permits on their own motion.

Therefore, in addition to containing the new terms summarized above, Approval RA18082 includes all existing terms, non-duplicative terms and conditions in Lacombe County

development permits #143-94 and #133-98, except the terms and conditions discussed in Appendix D.

Construction conditions that are being carried forward and that have been met are identified and included in an appendix to the new approval.

Pursuant to section 23 of AOPA (approval officer amendments), I have determined that conditions # 3, 5, 6, 7, 9, and 10 from Lacombe County development permit #133-98 should be deleted and therefore are not carried forward to Approval RA18082. My reasons for deleting these conditions are provided in Appendix D.

8. Conclusion

Approval RA18082 is issued for the reasons provided above, in the attached appendices, and in Technical Document RA18082.

Chicken Hill Farms Ltd.'s deemed approval, including Lacombe County development permits #143-94 and #133-98, are therefore cancelled, unless Approval RA18082 is held invalid following a review and decision by the NRCB's board members or by a court, in which case Lacombe County development permits #143-94 and #133-98 will remain in effect.

February 8, 2019


Francisco Echegaray, P.Ag.
Approval Officer

Appendices:

- A. Consistency with the municipal development plan
- B. Concerns raised by the directly affected party
- C. Variance for the water well setback
- D. Conditions in Approval RA18082

APPENDIX A: Consistency with the municipal development plan

Under section 20 of the *Agricultural Operation Practices Act* (AOPA), an approval officer may grant an application for an approval 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 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.”)

Chicken Hill Farms Ltd.’s CFO is located in Lacombe County and therefore is subject to that county’s MDP. Lacombe County adopted the latest update to this plan on July 6, 2017 (updated on March 8, 2018), under Bylaw #1238/17.

Sections 3.8 of the MDP relate to CFOs. Under section 3.8.1(a), the MDP prohibits “new” CFOs within 1.6 km (1 mile) from several areas listed in that section.

Chicken Hill Farms Ltd.’s application is not for a new CFO, and therefore, it is not subject to these setbacks. Irrespective, the CFO is outside of these 1.6 km setbacks.

Additionally, section 3.8.1 states that “further restrictions on the development of confined feeding operations may apply as directed by an Intermunicipal Development Plan or other local plan approved by Council.” The Gull Lake Intermunicipal Development Plan (IDP) covers the area in the application. Under the plan, new and expanded CFO’s are precluded within any areas marked as “development nodes.” Chicken Hill Farms Ltd.’s CFO is not located within a development node.

Expansion of an existing CFO is allowed within the Gull Lake watershed if the proposed expansion does not interfere with the development of lands for residential or recreational use. The proposed application does not interfere with the development of land for residential or recreational use, as it includes an already built facility.

For these reasons, I conclude that the application is consistent with the land use provisions of Lacombe County’s MDP (and the Gull Lake IDP). The county’s response letter confirms this conclusion.

In my view, the MDP clearly intends to incorporate Lacombe County’s Land Use Bylaw (LUB) #1237/17 (see NRCB Operational Policy 2016-7: *Approvals*, part 8.2.3). Accordingly, I considered the LUB. Under that bylaw, the subject land is currently zoned as Agricultural “A” District. (According to the county’s response, the surrounding lands within a 1,600 metre radius of the CFO are also all within the Agricultural “A” district, in addition to a number of parcels designated as Residential Lake Area ‘R-RLA’ District, and Recreation “PR” District.) CFOs are not listed as either a permitted or discretionary use within that zoning category. However, section 3.2.2(j) of the LUB states that CFOs do not require a development permit. I interpret this provision as meaning either that the county intended CFOs to have the same effective status as listed permitted uses, or that the county simply does not intend to address CFOs in its LUB

(given the NRCB's permitting role since AOPA came into effect in 2002). In its response, the county stated that the CFO is a permitted use, which is consistent with the first of these two interpretations. Under either interpretation, the proposed CFO expansion is not inconsistent with the LUB.

APPENDIX B: Concerns raised by the directly affected party

The directly affected party (Ms. Marilee Yakunin) raised a number of issues in her statement of concerns. The issues are summarized and listed below, together with my analysis and conclusions.

Applicant's response to the statement of concerns

In an email dated January 29, 2019, Mr. David Hyink, on behalf of Chicken Hills Farms, responded to some of the issues raised in the statement of concerns. The full letter is included on page 23 of 23 of Technical Document RA18082.

1. Increase in odours from the barns – The individual expressed concern about a potential increase in odours, and the impact on her quality of life due to odours, as she lives downwind from the CFO.

Approval officer's conclusion:

AOPA's minimum distance separation (MDS) is a means for mitigating odour and other nuisance impacts from CFOs. Chicken Hill Farms' CFO is located outside of the required MDS from other existing residences.

The following table provides the MDS categories, the required MDS calculations, and the distance to the closest neighbouring residences:

Land use zone	MDS Category	Required MDS	Nearest neighbour
Agriculture	Category 1	159 m	330 m
Country residential	Category 2	212 m	-
Large scale country residential	Category 4	425 m	481 m

Notwithstanding the CFO's distances to its nearest neighbours, it is reasonable to expect that there will be some odour emissions and other potential nuisances after the CFO expansion in bird numbers.

Often, any issues that arise relating to the operation of a CFO, and other disagreements, can be resolved through good communication between neighbours and the CFO operator. However, if a member of the public has concerns regarding a CFO, including whether or not the operation is complying with AOPA, they may contact the NRCB through its toll free response line (1-866-383-6722 or 310-0000). An NRCB inspector will follow up on the concern.

2. Odours from manure spreading – The respondent raised a concerns regarding odour during manure application

Applicant's response:

The operator indicated in a response to the statement of concerns that Chicken Hill Farms Ltd. has not spread any manure in the area in well over 10 years, and they sell the manure produced to a grain farmer located 75 km away.

Approval officer's conclusion:

Manure application is regulated under section 24 of the Standards and Administration Regulation.

Section 24(1) of the regulation requires manure to be incorporated within 48 hours of application when it is applied to cultivated land.

Incorporating reduces odours by working the manure into the soil. This type of land application of manure is typically limited to once or twice per year and are typically of short duration. Odours from manure spreading typically do not persist for extended periods of time.

Under section 24(2)(a) of the regulation, a permit applicant must satisfy an approval officer that they have access to sufficient land base to apply their manure for the first year following the granting of the application. The applicant has met this requirement.

Under section 24(5)(a) of the regulation, manure does not need to be incorporated after surface application on forages, or on no-till cropland, in order to conserve the soil. However, the manure must be applied at least 150 metres from any residence. This setback helps mitigate the odour from manure spreading without incorporation.

The Standards Regulation has other requirements to protect the soil, groundwater, and surface water from excessive application of manure. These include soil testing requirements, soil salinity limits, nitrate-nitrogen limits, setbacks based on the slope of the terrain to common bodies of water, and setbacks to water wells and residences. Under the regulation, the operator must also keep manure spreading and soil sampling records for five years and provide those records to the NRCB upon request.

When followed, all of these AOPA requirements will provide protection to neighbours from odours and nuisances from manure spreading.

Additionally, Lacombe County included a condition in its development permit #133-98, precluding the operation to spread manure within one mile of the Summer Village of Gull Lake or Provincial Park unless incorporated within 24 hours of application. This condition is in effect, and will be included in Approval RA18082.

Complaints about CFO-related issues can be reported to the NRCB's 24 hour complaint line (1-866-383-6722) and will be followed up on by an NRCB inspector within 24 hours. Neighbours can also call any NRCB office during regular business hours if they have questions about permit conditions or ongoing AOPA operational requirements.

3. Increase in CFO size – The respondent indicated that the operation has continued increasing in size for many years, and she questions “when is it enough?”

Approval officer's conclusions

The application meets all AOPA technical requirements including siting in relation to neighbouring residences (with use of expansion factor). AOPA does not limit how large an operation can be, rather if a proposed operation meets the regulatory requirements which are designed to limit nuisance odours and ensure environmental protection.

4. Groundwater quality – The directly affected individual raised concerns regarding groundwater contamination from the CFO expansion.

Approval officer's conclusions

As noted in the decision summary above, and documented in Technical Document RA18082, the CFO facilities meet all AOPA technical requirements. Several of these requirements are designed to prevent or minimize manure leakage from CFO facilities and thus to prevent manure from reaching and contaminating groundwater. Because the CFO facilities meet or exceed these requirements, I concluded that the level of groundwater risk posed by these facilities is acceptable.

As noted in section 5 of the decision summary, I assessed the CFO's facilities, using the NRCB's environmental risk screening tool (ERST), in order to determine the level of risk they pose to groundwater. The CFO's facilities pose a low risk to groundwater.

5. Surface water – The NRCB received a concern from the individual related to the impact of the CFO facilities into the quality of the surface water (namely Gull Lake), and runoff from the facilities to her subdivision.

Approval officer's conclusions

AOPA and its regulations contain several requirements to prevent or minimize manure leakage from CFO facilities and thus to prevent CFO manure from reaching and contaminating surface water. Two of these requirements are the setbacks from springs and common bodies of water set out in section 7(1)(a) and (c) of the Standards and Administration Regulation, which prohibits the construction of a manure storage facility or manure collection area less than 100 metres from a spring and 30 metres from a common body of water.

During my site visits, I did not note any springs or common bodies of water within 100 metres and 30 metres, respectively, of the proposed CFO. I also verified these distances by reviewing available air photos. The proposed CFO meets all of these requirements.

As noted in section 5 of the decision summary, I assessed the CFO's facilities, using the NRCB's ERST, in order to determine the level of risk they pose to surface water. The CFO's facilities pose a low risk to surface water.

As noted in the decision summary above, and further documented in Technical Document RA18082, the CFO meets all AOPA technical requirements. Because the CFO meets or exceeds these requirements, I concluded that the level of risk to surface water posed by the proposed CFO facilities is acceptable.

Incidences of non-compliance can be reported to the NRCB's 24 hour complaint line 1-866-383-6722 or 310-0000 (toll free line). NRCB inspectors investigate all complaints.

6. Inhumane treatment of animals – The respondent was concerned with the animal welfare on these type of operations.

Applicant's response:

The operator indicated in a response to the statement of concerns that the goal of the expansion is to improve the bird's environment, and to allow more space for each bird. That is

why the increase in number of birds is so small. By approving the existing barn, the birds can continue to enjoy the extra space that was built for their care.

Approval officer's conclusions

Animal welfare is the responsibility of the Food Safety and Animal Welfare Division of Alberta Agriculture and Forestry, and other agencies (Alberta Chicken sets minimum standards for housing to ensure good animal welfare). Animal welfare does not fall under AOPA and is therefore not considered as part of my review of the application. Operators are responsible for the welfare of the livestock under their care and control.

APPENDIX C: Variance for water well setbacks

According to the application, one water well is located approximately 95 metres from the broiler barn that was converted without a permit. I have confirmed this information by a site visit and aerial photography.

Because of this proximity, the applicant's broiler barn #4 conflicts with a regulation under AOPA, which prohibits the construction of manure storage facilities (MSFs) within 100 metres of water wells.² The regulation allows approval officers to grant an exemption from this prohibition for proposed facilities, not already constructed ones.

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.

On January 28, 2019 the CFO operator requested a variance to the water well setback requirement on the grounds that the well is located up gradient of the barn, and the probability of runoff from the barn reaching the well is low.

Approval officers must not grant variances lightly or in the absence of substantive evidence they will produce equivalent levels of protection (see Decision 03-04, *AAA Cattle Ltd.* p 24). In considering whether a variance is appropriate in this particular circumstance, I have used the same tools that I would normally look at 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 broiler barn #4. In this case I presume that the risks of direct aquifer contamination from the MSF are low if the MSF meets AOPA's technical requirements to control runoff and leakage. However, when determining whether a MSF that meets AOPA's technical requirements should be exempted from the 100 metre water well setback requirement, I also assess whether water wells that are less than 100 metres from the MSF could act as conduits for aquifer contamination.

Approval officers assess the following factors to determine the risk of aquifer contamination via the water well:

- How the well was constructed
- Whether the well is being properly maintained
- The distance between the well and the proposed MSF
- The estimated water well pumping rate
- 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 8.7.1.

The water well

In this case, water well ID# 273622 is located about 95 metres from the already built broiler barn #4. Usually, the surface slope is an indicator of the direction of groundwater flow. In this case,

² Standards and Administration Regulation, Alta. Reg. 267/2001, section 7(1)(b).

the well is located up-gradient from the barn, so groundwater is unlikely to flow from below the barn toward the water well.

The total depth of the well is 36.6 metres. The water well drilling report indicates that the well was drilled in 1988, has a driven seal from surface to 18.9 metres, and the depth to open interval starts at 30.5 metres. Information on the subsurface lithology of the well shows an approximately 16 metre thick layer of shale covering a sandstone layer. I identified the uppermost groundwater resource to be at a depth of 14.9 metres.

Based on this information it is my assessment that varying the 100 metre setback rule for broiler barn #4 would offer the same degree of protection and safety as that provided for by the regulations for the following reasons:

- Broiler barn #4 is an under roof facility, it has a concrete liner and is located down gradient of the water well, as noted above in this decision summary and in Technical Document RA18082. Therefore, the risk of manure-contaminated water leaking from the barn reaching the well is low.
- In the unlikely event that any manure did leave the barn, it is unlikely to migrate directly into the aquifer into which the well is drilled because of how the well is constructed and due to the protective layers located above the aquifer.
- In the unlikely event that any manure reaches the well, the manure is unlikely to actually enter the well and flow down the well into the aquifer because of the well's casing and driven seal.

In addition, 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 and to decide whether an exemption from the 100 metre setback to a well is warranted.³ This tool consists of a two-stage risk screening process; each stage provides a numeric risk "score" based on the information inputted into the tool.

The first stage focuses on the well's construction. If the well scores less than 10 at this stage, the tool suggests granting a setback exemption for the subject facility. If the well scores above 28, the tool recommends denying the exemption. Scores between 10 and 28 require applying the second stage of the screening process, which focuses on the gradient and other factors bearing on the risk of manure runoff or leachate reaching the water well. If the risk score at this stage is over 20, the tool suggests denying the setback exemption to the subject well.

For the process described above, water well 273622 scored 15 in the first stage, and 5 in the second stage. Based on these risk scores, results of the first risk screening stage indicate that the protection for groundwater may not be the same as in the regulations (largely due to the well's seal type). However, the first risk screening stage also directs me to take action and to continue with the second risk screening stage. The second stage of the risk screening stage indicates that an exemption could be granted.

Based on the above considerations, I am prepared to grant a variance to the setback due to the well's location relative to the barn. It is my opinion that the variance provides the same or greater degree of protection and safety as the regulations.

³ The tool, and a companion document explaining how it works, can be viewed on the NRCB's website at: www.nrcb.ca.

APPENDIX D: Conditions in Approval RA18082

Approval RA18082 includes several conditions, which are carried forward from Lacombe County development permit #133-98 (see Approval RA18082 and its appendix).

1. Conditions not carried forward from Lacombe County development permit 133-98

- Spreading of manure on frozen or snow covered land not permitted. All manure spread on land to be done so in accordance with guidelines contained in the Code of Practice for the Safe and Economic Handling of Animal Manures.

AOPA and its regulations supersede the requirements of Alberta Agriculture's (now Alberta Agriculture and Forestry) Code of Practice. This condition is therefore impossible to enforce due to the passage of time, is redundant and will be deleted and not carried forward. (See NRCB Operational Policy 2016-1: *Amending Municipal Permit Conditions*, section 2.1.) Approval RA18082 states that the permit holder shall comply with the requirements of AOPA and the regulations passed pursuant to that act.

- Prior to start-up of expanded operation, and thereafter on three-year interval, appropriate soil analysis to be done on all lands used for manure spreading by qualified professional engaged by owner/operator to determine proper manure application rates and adequacy of land base for spreading. Results of such analysis to be provided to County and Alberta Agriculture, Food and Rural Development.

Section 24(2) of the Standards Regulation under AOPA requires, as a condition for granting an approval, that the applicant have sufficient land for manure application in the year following the NRCB's issuance of the approval. In addition, section 24(3) of the Standards Regulation states that a person "must have access to sufficient land for the application of manure" in order to meet the applicable limits for nitrate-nitrogen in Schedule 3 of the regulation (or have a nutrient management plan approved by the NRCB). The county's condition requires a "proper" manure application rates and "adequacy" of land base for spreading, but does not define what "proper" or "adequacy" mean. AOPA has its own land base requirements which are more specific.

Therefore, the AOPA land base requirements are a reasonable proxy for the county permit requirement, so the county permit condition is redundant and will be deleted and not carried forward. (See NRCB Operational Policy 2016-1: *Amending Municipal Permit Conditions*, section 2.1.)

- Dead birds to be stored and/or disposed of in prompt and acceptable manner.

This condition relates to the disposal of dead animals which is regulated by Alberta Agriculture. All livestock owners are required to dispose of livestock mortalities in accordance with the Animal Health Act Disposal of Dead Animals Regulation. Given Alberta Agriculture's direct oversight disposal of dead animals and the regulatory requirements. For these reasons, and pursuant to the NRCB policies referenced above, these conditions will not be carried forward. (See NRCB Operational Policy 2016-1: *Amending Municipal Permit Conditions*, section 2.1. and the *Memorandum of Understanding between the NRCB and Agriculture and Rural Development, Animal Health and Assurance Division (with Addendum) Relating to Dead Animal Disposal Complaints*, June 2013 and December 2014.)

- Any manure contaminated run-off to be fully contained on owner's property. Owner/operator must also ensure that manure stays on lands on which it was spread. Drainage courses or other bodies of water on property and other lands used for spreading must be protected from contamination. Run-off to be directed away from manure storage site and berm constructed around storage site to prevent seepage and run-off from manure pile.

Since this condition is now reflected in the Standards Regulation under AOPA, the condition is redundant and will be deleted and not carried forward. (See NRCB Operational Policy 2016-1: *Amending Municipal Permit Conditions*, section 2.1.)