

Decision Summary RA15060A

This document summarizes my reasons for issuing Approval RA15060A, an amended version of Approval RA15060. This amended approval is issued under section 23 of the *Agricultural Operation Practices Act* (AOPA). My decision is based on the act and its regulations, the policies of the NRCB and all other materials in the application file.

Approval RA15060 and its associated documents are available from the decisions search engine on the Natural Resources Conservation Board (NRCB) website at www.nrcb.ca.

1. Background and reasons for the amendment

Colin Rice owns and operates a beef (feedlot) confined feeding operation (CFO) on NE 30-41-27 W4M. The site is located in Lacombe County, roughly 12 km northwest of Lacombe, Alberta. The terrain is generally flat and the CFO site is approximately six km east of Gull Lake.

Issued on September 7, 2016, Approval RA15060 allowed Mr. Rice to construct a series of pens in a feedlot with a maximum capacity of 1,600 beef finishers. The overall dimensions of the feedlot pens were permitted to be 240 metres x 170 metres. That permit also requires the construction of a berm to contain runoff in NE 30-41-27 W4M and included operating conditions related to the management of a vegetated filter strip and manure application. The permit also included a flexible (extendable) construction completion deadline of September 30, 2017 for the feedlot.

On November 3, 2017 the NRCB issued Mr. Rice a letter in relation to a construction completion inspection of a portion of the feedlot pens. Mr. Rice had constructed a series of pens that had overall dimensions of 240 m x 90 m. The berm to contain runoff was also constructed. That letter granted Mr. Rice permission to populate the constructed pens and granted an extension to the construction completion deadline until September 30, 2018.

On August 30, 2018, I met with Mr. Rice at the CFO to discuss the approaching construction completion deadline and how I would need to proceed if the construction deadline was missed and if an application to amend the permit was not received before the permit's deadline passed. I told Mr. Rice that if the permitted construction was not completed before the deadline passed I would need to amend his permit to reflect what has been constructed and reduce the CFO's livestock capacity to reflect the capacity of the constructed facilities. I shared with him that this is in line with NRCB policy, discussed below. On that occasion, Mr. Rice did not request to extend the construction completion deadline, nor have I received a request to extend the deadline since then.

I spoke with Mr. Rice again on March 13 and 20, 2019. On these occasions we again discussed the construction completion deadline that had already passed and how I would need to proceed. Mr. Rice stated verbally, and in writing, that he does not intend to construct the remaining portion of the permitted feedlot.

Based on the above, I am amending Approval RA15060 on my own motion under section 23 of AOPA and in accordance with NRCB's *Construction Deadlines* policy (Operational Policy 2015-1). Under the construction deadline policy an approval officer amendment is warranted if

there is partial construction and a construction deadline has not been met. In this case, the amendment documents what has been constructed within the allowed construction completion deadline. The facilities that were not constructed within the deadline will be removed from the permit and no longer allowed to be constructed unless a new permit is issued for them. The amendment also proportionally reduces the livestock capacity of the CFO to reflect the capacity of the remaining permitted facilities.

a. Feedlot capacity

The feedlot that Mr. Rice applied for, and was permitted to construct, had an area of 40,800 m². That feedlot would allow for an approximate stocking density of 25.5 m² per beef finisher. The feedlot constructed by Mr. Rice has an area of 21,600 m². Based on this density and feedlot per area, the constructed feedlot pens should be able to contain approximately 850 beef finishers. Those beef finishers will produce approximately 1,870 tonnes of manure per year according to the *Manure Characteristics and Land Base Code*.

Despite the above, it is not uncommon in my experience for a feedlot operator to run beef livestock at a slightly higher density than one finisher per 25.5 m² in a CFO. It is also not uncommon for a CFO operator to have other livestock types present (within the same livestock category) at a CFO.

Mr. Rice indicated in correspondence related to this permit amendment that he is currently confining and feeding approximately 1,400 beef feeders in his CFO.

AOPA allows CFO operators to switch between livestock type within a category (i.e. from beef finishers to beef feeders; note, beef feeders are typically smaller animals than beef finishers), but there must not be any increase in manure production beyond what the current permit(s) allow. Mr. Rice is reminded through issuance of this decision summary that he as a CFO operator is required to notify the NRCB in writing *before* making a livestock management change of this nature.

i. Manure production

The 1,400 beef feeder stocking rate indicated by Mr. Rice will produce approximately 1,960 tonnes of manure per year. As noted above, Approval RA15060 is for beef finishers opposed to beef feeders. The 1,960 tonnes of manure are approximately equivalent to the manure produced by 900 beef feeders per year. When compared to the calculated density for the feedlot noted above, 900 beef finishers would produce only about five percent more manure than the manure generated by the 850 beef finishers discussed above.

ii. Livestock density

To confirm what stocking densities would be considered appropriate for a beef feedlot akin to Mr. Rice's, I consulted the *Code of Practice for the Care and Handling of Beef Cattle* (2013). That document does not specify a maximum or minimum stocking density for beef livestock in feedlots. Rather, that document states that "stocking densit[ies] must be managed such that weight gain and duration of time spent lying is not adversely affected by crowding" (see part 1.2 of the code of practice). I note that this code of practice provides a subjective measure that is intended to address many climatic conditions and animal management housing and management methods across Canada.

The NRCB and Alberta Agriculture and Forestry, in consultation with various livestock industries, created a *Calculator for Determining Livestock Capacity of Operations as They Existed on January 1, 2002* (Agdex 096-81). I am of the opinion that Mr. Rice's CFO is constructed and managed in a method similar to those that would have been encountered in Alberta in 2002.

In the livestock capacity calculator beef (feedlots) have an expected stocking density of 18.6 m² to 23.2 m² per finisher and 16.3 m² to 18.6 m² per feeder. Mr. Rice's permitted finisher livestock capacity results in a density of 25.5 m² per finisher. His indicated running capacity of 1,400 feeders has a density of approximately 15.4 m² per animal while the 900 finishers would have an approximate density of 24 m² per animal. Both of these calculated livestock densities are within ten percent of the values stated in the calculator. I am of the opinion that these densities are reasonable for a CFO of this nature.

Considering the above discussion of manure generation and livestock densities, I am of the opinion that Mr. Rice's livestock density claim and the associated manure production is reasonable for this CFO. For these reasons, I am amending Mr. Rice's approval to state a livestock capacity of 900 beef finishers.

2. Other factors considered

This approval officer amendment meets all relevant AOPA requirements with the terms and conditions summarized below, in Approval RA15060 and Decision Summary RA15060.

As noted in Decision Summary RA15060, that application was consistent with the land use provisions of Lacombe County's municipal development plan. This approval officer amendment does not affect that municipal development plan consistency determination. (See Appendix A of Decision Summary RA15060 for a more detailed discussion of the county's municipal development plan.) As the permitted animal capacity for the CFO is being reduced by this amendment, the assessments and conclusions in Decision Summary RA15060 about other considerations under Section 20 of AOPA also remain valid.

3. Terms and conditions

Approval RA15060A specifies the new permitted livestock capacity as 900 beef finishers.

For clarity and efficiency, and in accordance with NRCB policy, I have consolidated the previously issued approval into the new Approval RA15060A. Consolidating permits generally involves carrying forward all non-redundant terms and conditions from the prior permit into the new permit, and then cancelling the prior permit.

Therefore, Approval RA15060A contains all of the relevant terms from Approval RA15060, except for the construction conditions related to feedlot pens and livestock capacity which are already met. Those conditions will be carried forward, but will be stated as already met conditions in an appendix to the approval.

4. Conclusion

Approval RA15060A is issued for the reasons provided above.

Approval RA15060 is therefore cancelled, unless Approval RA15060A is held invalid following a review and decision by the NRCB's board members or by a court, in which case Approval RA15060 will remain in effect.

March 26, 2019

(Original Signed)
Jeff Froese
Approval Officer