



## **BOARD DECISION**

**2020-02 / RA19016**

Review of Decision Summary RA19016

Kramer Dairy Ltd.

March 26, 2020

**The Board issues this decision document, following its written review of Approval RA19016, held pursuant to the *Agricultural Operation Practices Act (AOPA)*.**

## **Background**

On November 20, 2019, NRCB approval officer Jeff Froese issued Decision Summary RA19016 and Authorization RA19016 with conditions, for the construction of a barn addition and calf lean-to at an existing dairy confined feeding operation (CFO). The CFO is owned and operated by Kramer Dairy Ltd. (Kramer Dairy) and is located at SE 2-43-25 W4M in Ponoka County (County).

A Request for Board Review (RFR) of Decision Summary RA19016 was filed by Kramer Dairy on November 29, 2019. The Kramer Dairy RFR asked the Board to remove the condition in Authorization RA19016 that reads:

10. Addressing the environmental risk posed by the earthen liquid manure storage. The permit holder shall submit a written plan by May 31, 2020 that addresses the environmental risk posed by the earthen liquid manure storage. The plan must be prepared by an independent and qualified third party professional and not be implemented until the plan has been approved by the NRCB in writing. Once the plan is approved by the NRCB in writing the plan must be implemented within five years, unless otherwise directed by the NRCB in writing.

NRCB Board Decision RFR 2019-07 was released on December 17, 2019, advising that the Board had determined that a written review was warranted to consider whether condition #10 was appropriate. In Board Decision RFR 2019-07, the Board posed a number of questions to the approval officer and to Kramer Dairy.

Submissions were filed by the approval officer on January 23, 2020 and by Kramer Dairy on February 11 and March 13, 2020. Ponoka County was provided an opportunity to file a further submission to the review on or before March 12, 2020. The County advised the Board that it was satisfied with its December 5, 2019 filing.

## **Issues Considered**

In determining that the review was necessary, the Board stated that it did not have sufficient information to conclude that the approval officer adequately considered the information that resulted in the finding that the EMS may pose a risk to groundwater. Essentially, the approval officer's Environmental Risk Screening Tool (ERST) finding that the existing EMS posed a low risk did not easily reconcile with the inclusion of condition #10 in Authorization RA19016.

The approval officer's January 23, 2020 submission provided a comprehensive description of the process that led to the conclusion that the existing Kramer Dairy EMS poses a potential risk to groundwater. Specifically, the approval officer detailed the ERST calculations through to the conclusion that the "best plan of action is ... to issue a decision that requires

submission of a plan to address the risk posed by the EMS.” Within this analysis, the approval officer referenced a number of factors leading to condition #10, including the following:

- 53. “As the maximum depth drilled for borehole log 19BH03 was 6.0 m, information about the underlying sand and weathered sandstone (bedrock) layers is missing for that area. Also, the engineering consultant did not measure the depth of the EMS, but rather predicted it at 3.75-4.5 m. Without this information, it is difficult to get a full picture of the interaction between the EMS and the sand and bedrock layers.”
- 55. “Without more accurate information, it is possible that shallow groundwater, including manure and manure-impacted groundwater, is moving from the EMS into the sand layer and towards the uppermost groundwater resource.”

In its March 13, 2020 submission, Kramer Dairy asked the Board the question:

“If we go ahead with more engineering work that could prove how the EMS is performing will the NRCB be satisfied with the results if there is no sign of leakage and the EMS is monitored regularly?”

In posing this question, Kramer Dairy’s February 11, 2020 submission stated that, without further tests, it is not known whether the EMS poses a risk to groundwater. The Board accepts that further engineering work and regular monitoring would be helpful in assessing the actual environmental performance of the EMS. Such a proposal also appears to be consistent with the written draft plan required in condition #10.

The Board also notes the Kramer Dairy assertion that, based on its discussions with the approval officer, the only way to have condition #10 removed is to reline or rebuild the EMS. Having regard for all of the filed material, the Board is satisfied that condition #10 requires a plan to address the environmental risk posed by the EMS, and that there has been no predetermination by the approval officer that the plan must include a reconstructed or relined EMS. The approval officer’s January 23, 2020 submission states:

- 58. “A written plan could resolve the uncertainty. The plan could, for instance:
  - a. ascertain the depth of the EMS, and what materials surround and underlay the EMS. A study might show the EMS with a more substantive protective layer around and below it;
  - b. propose to re-line the EMS; or
  - c. show that the groundwater conditions up- and down-gradient of the EMS do not differ.”

Kramer Dairy’s February 11, 2020 submission also referenced modifications it made to its EMS in 2003. While not critical to this review, the Board was unsuccessful in its efforts to locate any filings related to this activity. The Board reminds the operator that modifications to an EMS are subject to approval and inspection under AOPA.

The Board recognizes that the Kramer Dairy, at the time of its application for a barn addition and calf lean-to, did not anticipate the inclusion of any conditions related to its existing EMS. However, the *Agricultural Operation Practices Act (AOPA)* provides for an approval officer to include terms and conditions in any permit issued if the approval officer determines that any of the existing facilities may cause a risk to the environment.

Given the approval officer's uncontested evidence that the sand/sandstone layer is a potential water resource, and given that there is no evidence of a protective layer between the bottom of the EMS and the sand/sandstone below, the Board finds that the current EMS poses a potential risk to ground water.

## **Decision**

The Board denies the Kramer Dairy request to remove condition #10 from Authorization RA19016. The Board does note that some time has passed since the RFR was filed and that, with the time extensions requested by Kramer Dairy, this passage of time may present some challenges for Kramer Dairy filing a draft plan by the May 31, 2020 deadline. The Board expects that the approval officer would accommodate any reasonable request from Kramer Dairy asking for an extension of the filing date for the plan.

DATED at EDMONTON, ALBERTA, this 26<sup>th</sup> day of March, 2020.

*Original signed by:*

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Copies of the *Agricultural Operation Practices Act* can be obtained from the Queen's Printer at [www.qp.gov.ab.ca](http://www.qp.gov.ab.ca) or through the NRCB website.