

## Information Request Form Crystal Springs Lagoon Project

**Information Request  
Number:**

Second Request - Information Request No. 5

**Submitted by:**

The Rural Municipality of Gimli

**Date Submitted:**

March 6, 2026

**Subject Matter:**

Lagoon Operation

**Reference document:**

Permit 2021-A-29 issued by the Fisher Armstrong Planning District, October 14, 2021 (**Appendix A to Reply to Information Request No. 5**)

**Request 1:** Other wastewater lagoons in the Province with abattoir wastewater have aerated secondary cells to assist with treatment, and/or discharge to land (as prescribed by their Licenses). Can the Proponent comment on why these approaches are not being proposed here?

**Reply 1:** It is important to understand that the Proponent is a Hutterite Colony that processes livestock for their own consumption; the abattoir is not a commercial killing plant. The colony only operates the kill plant periodically when the colony members are processing their own food.

The majority of Hutterite Colonies within Manitoba operate an abattoir for on colony consumption at their respective colony sites - we are not aware of any that have aerated lagoon cells.

Typically, aerating lagoons will improve wastewater treatment efficiency and can be effective at treating high organic loading. In the opinion of the Proponent's consulting engineers (BMCE), the commercial abattoirs and their lagoons that are being referred to are likely receiving higher organic loads and are deeper with a smaller footprint. In those situations, aeration would be a suitable option. BMCE did not design the proposed facultative lagoon in this manner, as there was suitable land available to obtain optimum surface area/depth.

Additionally, it is BMCE's opinion that a facultative lagoon with natural biological treatment process is the desirable design strategy for most small lagoons. Implementing mechanical equipment to a lagoon increases the complexity of the operations as well as potential for breakdowns and therefore insufficient treatment. BMCE's preference is to design the lagoon and allow the natural biological processes to occur without the complexities of mechanical equipment.

**Request 2:** Considering this is a facility that is being designed for one (1) annual discharge event, can the Proponent confirm that the Primary cell will not experience overloading during the period (approximately 40 days) when the secondary cell is isolated in preparation for the discharge event?

**Reply 2:** Yes, the primary cell has been sized with additional storage capacity to allow for 40 days of isolation and trickle discharge of the secondary cell. The additional capacity built into the primary cell is approximately 4,300 m<sup>3</sup>.

**Follow-Up Information Request:** The Proponent has indicated that approximately 4,300 m<sup>3</sup> of additional capacity has been provided in the primary cell to accommodate the period during which the secondary cell is isolated for discharge. Can the Proponent identify:

- a) The assumed influent flow conditions used in sizing this additional storage capacity;
- b) Whether any peaking factors, batch loading from abattoir operations, or wet-year inflow conditions were considered in the storage assessment; and
- c) The level of contingency, storage allowance, and/or factor of safety, if any, incorporated into the design of the primary cell capacity to accommodate the period during which the secondary cell is isolated for discharge.

**Request 3:** Can the proponent confirm that it has applied for and received the relevant development permits associated with the construction of the lagoon and associated outbuildings? If so, can the proponent produce copies of the permits that have been issued in relation to the construction of the lagoon and the associated outbuildings.

**Reply 3:** The proponent applied for a Development Permit for the establishment of a Communal Farm Dwelling along with associated cooking, eating, living, sleeping and sanitary facilities. Permit 2021-A-29 was issued by the Fisher Armstrong Planning District on October 14, 2021; a copy is attached hereto as **Appendix “A”**.

The Environmental Act Proposal (EAP) and licensing is the primary license for the construction of a wastewater treatment lagoon in Manitoba. This is the process that is the subject of these proceedings.