

Information Request Form Crystal Springs Lagoon Project

**Information Request
Number:**

Second Request - Information Request No. 6

Submitted by:

The Rural Municipality of Gimli

Date Submitted:

March 6, 2026

Subject Matter:

Emergency Discharge

Reference document:

N/A

Request 1: In Ontario within the Lake Erie Watershed, if the lagoon systems are overwhelmed hydraulically and the lagoon operator requests an emergency discharge, the lagoon operator will add alum near the discharge pipe to reduce the amount of phosphorus being unloaded. Provincial data and emergency reports indicate that at least 50 municipal wastewater lagoons across Manitoba (primarily in the Red River Valley and Interlake regions) were granted emergency discharge authorizations or "Licence Suspensions" by the Province in 2022. Has the Proponent prepared an emergency management plan that contemplates, *inter alia*, the addition of alum near the lagoon discharge pipe in the event of an emergency discharge? If not, why not?

Reply 1: All Provincial territories have their own regulations for environmental protection that vary from Province to Province. To the best of BMCE's knowledge, and based on review by the provincial regulator, Manitoba

Environment and Climate Change, the wastewater lagoon that is the subject of this proceeding has been designed to meet applicable Manitoba Provincial Regulations.

The Proponent is unaware of the lagoon design and specific circumstances related to each of the referenced 50 lagoons that required an emergency discharge. The subject lagoon has been designed with safety factors to minimize the potential that an emergency discharge is required at all.

For example, the lagoon was designed for a full build out of the community with an occupancy load of 250 persons, while most colonies never exceed 175 before they split to a new site. The initial colony population is anticipated to be approximately 75 to 100 people, less than 50% of the lagoon design capacity.

The potential for emergency discharge, while highly improbable, could exist under the most extreme conditions. The Proponent states that if the CEC and MCC feel appropriate, a condition of the license could include a requirement that the Proponent develop and maintain an Emergency Response Plan that would be submitted to and accepted by MCC.

Follow-Up Information Request: The Proponent has indicated that the lagoon has been designed with safety factors such that the need for emergency discharge is considered highly improbable. For clarity, can the Proponent indicate:

- a) The key design assumptions and safety factors relied upon in reaching this conclusion; and
- b) Whether any analysis was undertaken to evaluate lagoon performance under extreme hydraulic or climatic conditions. If so, please provide particulars of the analysis performed and the results of the analysis. If not, please indicate why not.

Furthermore, the Manitoba Water Quality Standards, Objectives and Guidelines (MWQSOG) were originally developed in 2011 based in part on scientific literature and regulatory approaches adopted in other jurisdictions, including Ontario.

- (a) Please identify whether the Proponent reviewed any updates to nutrient management standards, guidance, or regulatory frameworks in other jurisdictions since the publication of the MWQSOG in 2011.
- (b) If so, please describe how those updates were considered in the Proponent's assessment of nutrient management and potential impacts to receiving waters.
- (c) If not, please explain why reliance on the 2011 MWQSOG remains appropriate given developments in scientific understanding and regulatory practice related to nutrient loading and freshwater lake protection since that time.