MAY 29, 2026

CLEAN ENVIRONMENT COMMISSION REPORT

ON THE HARBOUR COLONY WASTEWATER LAGOON PROJECT

Manitoba CLEAN·ENVIRONMENT™ COMMISSION

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May 29, 2026

Honourable Mike Moyes
Minister of Environment and Climate Change
Room 344, Legislative Building
450 Broadway
Winnipeg, Manitoba R3C 0V8

Re: Harbour Colony Wastewater Treatment Lagoon Proposal

Dear Minister Moyes,

The panel is pleased to submit the Clean Environment Commission's report on the technical review and public hearing with respect to the Harbour Colony Wastewater Treatment Lagoon Proposal.

Sincerely,

Original signed by

Aimée Craft, Chairwoman

Original signed by

Lydia Carpenter

Original signed by

Don Labossiere

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Foreword

In September of 2025, the Minister of Environment and Climate Change requested the Clean Environment Commission (CEC) to conduct a public hearing on the proposed Harbour Colony domestic wastewater treatment lagoon. Specifically, the Terms of Reference directed the CEC to "conduct a public hearing relating to The Environment Act Proposal and the environmental assessment report and provide advice and recommendations to the minister regarding potential environmental effects of the proposed wastewater treatment lagoon." As part of the CEC's hearing process, members of the public had the opportunity to provide their input on the project. Public participation is a hallmark of good environmental decision-making and we are grateful to all those who participated in the process.

The CEC hearing process incorporates the public registry files from the review of a project (including from before the CEC becomes involved). This includes the Environment Act Proposal (EAP), Technical Advisory Committee (TAC) comments and the proponent's responses and public comments. As part of the CEC's hearing process, there were several rounds of information requests between the parties to the hearing, and participants submitted expert evidence on the proposal. The CEC also received an independent review of the project. The hearing itself took place over 3 days, where the CEC received written submissions and oral statements from presenters. The Rural Municipality of Gimli took part in the hearing as an official participant notwithstanding that the development is within the Rural Municipality of Armstrong.

Since its inception, the CEC has been extensively involved in examining the impact of wastewater treatment on the environment, with a focus on protecting Manitoba's watersheds. Over the last 40 years, the CEC has made numerous recommendations aimed at improving and/or phasing out certain practices, adopting limits for phosphorous and nitrogen, suggesting options for removal of nutrients, disinfection, and calling for immediate action to address sewer overflows.

In 2009 the CEC recommended strict total nitrogen and phosphorus limits on the City of Winnipeg's wastewater treatment facilities. In the same report, the CEC commented more generally on the need to enhance the management of applicable criteria for septic fields, holding tanks and treatment lagoons.

"There is a need for regulatory initiatives that would establish reasonable criteria for better management of septic fields, holding tanks and treatment lagoons. Many of these systems are contributing nutrients and contaminants to the watershed. Evidence was presented to the Commission of poorly sited, installed, and maintained septic fields and holding tanks. Some lagoons are undersized and, as a result, require permission from Manitoba Conservation to make emergency discharges. The nutrient management strategy should promote the regionalization of wastewater treatment and the phasing out of lagoon and septic systems wherever possible. Priority should be given to those systems that discharge directly into the Red River and Lake Winnipeg."

The CEC also reviewed wastewater impacts from industrial activities expansion in Portage la Prairie and Brandon in 2002 and 2003. The CEC last conducted a domestic wastewater treatment lagoon hearing in 1994, for the Village of Teulon (as it then was).

According to the Department of Environment and Climate Change, Manitoba is home to nearly 350 licensed wastewater treatment lagoons. A brief review of the department's public registry of Environment Act Licenses files shows that at least since 2009, 130 lagoon licenses were issued (for new facilities or changes to existing facilities) with roughly half of them discharging into the Red River or Lake Winnipeg watersheds. Lagoons have not been phased out but rather continue to be a common means of wastewater treatment, and a regularly licensed activity in Manitoba.

We believe this project was brought to the attention of the CEC in part because of concern raised regarding the receiving waterway, Willow Creek, and concerns for Lake Winnipeg which is downstream of the receiving watercourse. Nutrient loading targets have been developed for Lake Winnipeg and large tributaries in the Nutrient Target Regulation under The Water Protection Act. The nutrient target is an overall goal and is not the same as the wastewater treatment limits. One of the current regulated wastewater treatment limits that must be met in Manitoba is a total phosphorus (TP) limit of 1 mg/L. This standard is applicable to the proposed project. This is not to say that as a province, Manitoba should not strive to do better and require even less nutrient loading, as suggested by The Water Protection Act and Nutrient Targets Regulation. However, to hold a single proponent to a higher standard than others would be fundamentally unfair. This is why we have recommended that the license be issued to the proponent, with conditions, and that the department undertake steps to monitor impacts on the waterway and make adjustments as necessary to help ensure the ongoing health of the Willow Creek Watershed and Lake Winnipeg. We have also made some policy recommendations to this effect, along with some suggestions to improve the integration of decision-making in similar contexts and to help ensure that policy and regulations align with environmental best practice, including consideration of cumulative effects as part of environmental decision-making.

Chapter One
Introduction

1.1 The Manitoba Clean Environment Commission

The Manitoba Clean Environment Commission (CEC) is an arm's-length, provincial agency established under the authority of The Environment Act (1988), wherein the CEC is mandated to provide advice and recommendations to the Minister of Environment and Climate Change, and to develop and maintain public participation in environmental matters. In the context of this review, the CEC held open hearings to allow members of the public to provide input on the Environment Act Proposal (EAP) prepared by the project's proponent (7317434 Manitoba Ltd.) and to state their opinions to the hearing panel.

1.2 The Project

The Harbour Colony proposes to construct and operate a two-celled domestic wastewater treatment lagoon. The lagoon will treat wastewater generated from a new colony development being constructed on SE 28-18-03 EPM in the Rural Municipality (RM) of Armstrong. The new development is proposed to have a population of approximately 250 people and include residences, a school, and communal buildings including a church, kitchen, and dining hall. Agricultural and light industrial activities on the site are proposed to include a truck wash and abattoir. Treated lagoon effluent is proposed to be discharged to a drain that runs parallel to Road 15E, then in the Willow Creek for approximately 15 kilometers where it will eventually enter Lake Winnipeg.

1.3 The Proponent

The proponent for this project is 7317434 Manitoba Ltd. Originally named Crystal Spring Colony, it changed its legal name to Harbour Colony in February 2026. Crystal Springs Colony is a Hutterite colony located near Ste. Agathe, Manitoba. When a colony becomes too large, it will typically establish a new colony, called a daughter colony. The new colony in the RM of Armstrong is named Harbour Colony. Hutterites are a communal religious group who often live in rural, self-sufficient, agricultural colonies. There are over 110 Hutterite colonies in Manitoba.

**For the sake of clarity, this report will refer to the proponent by the new name of Harbour Colony, except where directly quoting documents that use the earlier name.*

1.4 Terms of Reference

On September 12, 2025, the Minister of Environment and Climate Change wrote to the CEC requesting that the CEC hold public hearings on Harbour Colony's application for an Environment Act license for a domestic sewage lagoon project. The letter noted, that during the comment period for the EAP, requests for a CEC hearing were made by the public. The Director of the Environmental Approvals Branch decided not to recommend a hearing.

Seven appeals of that decision were filed with the minister. The minister directed the CEC to carry out a hearing in accordance with section 6(5)(a) and (b) of The Environment Act and in accordance with the

CEC's Process Guidelines Respecting Public Hearings. The letter instructed the CEC to provide advice and recommendations to the minister and provided the CEC with terms of reference for the hearing as follows:

"1. The CEC will conduct a public hearing relating to The Environment Act proposal and the environmental assessment report and provide advice and recommendations to the Minister regarding potential environmental effects of the proposed wastewater treatment lagoon.

2. The CEC will provide members of the public with the opportunity for input regarding the Crystal Spring Colony wastewater treatment lagoon proposal as part of the public hearing in a location consistent with the affected community.

The CEC review process should begin immediately and be completed as soon as possible.

The CEC's final report with recommendations, including licensing conditions, should be provided by February 28, 2026."

A subsequent letter extended the time frame for the CEC's work with the final report required by May 29, 2026.

1.5 The Hearing

Three days of public hearings were held, from April 21 to 23, 2026, at the Fraserwood Community Hall in the RM of Armstrong, within Treaty 1 territory, very near Treaty 2 territory and in the homeland of the Red River Métis. The Interlake Region is also an area of significant European (primarily Icelandic and Ukrainian) settlement in the late 19th and early 20th centuries. During the proceedings, the proponent and participant presented information and were questioned by one another, the CEC and the public. An evening session was held on April 22, to provide members of the public the opportunity to make presentations. Written submissions were also received, posted on the CEC website and considered. The hearing record was closed at the conclusion of the hearing. Hearing transcripts are also on the CEC's website.

During the hearings, 4 individuals gave testimony. The proponent advanced Daniel Burns P.Eng. with Burns Maendel Consulting Engineers Ltd. whose firm had authored the proponent's EAP, the RM of Gimli, which took part in the hearing as a designated participant advanced Indra Kalinovich, Ph.D., C.Chem., P.Eng., FEC who had authored a report "Cumulative Impact Study - Lagoon Wastewater Discharge" and Kevin Chudd, Mayor of the RM of Gimli who gave testimony on their behalf. The technical advisor for the CEC, Carson MacKenzie with Keewatin-Aski Ltd. whose firm had authored an independent review of the proposal also gave testimony.

Public hearings provide an opportunity for citizens to exercise influence over the quality of their living environment, which aligns with overarching intent of The Environment Act, to protect and maintain the environment in a manner which sustains a high quality of life for present and future generations. During the evening session, 18 presentations were given by members of the public, including presentations by individuals and organizations who expressed their views on the proposal. The CEC also received 13 written submissions from members of the

public. As a result of these hearings, the CEC has a greater understanding of the project and its potential environmental effects. We thank all those who participated in the hearing process.

1.6 The Report

This report is divided into six chapters describing the process, the proposed project, the areas of potential effects of the project and the CEC's conclusions and recommendations. Within these sections are summaries of the matters discussed by the proponent in the EAP and in the hearings, summaries of concerns raised (under the heading "What We Heard") and statements of the panel's thoughts on these matters (under the heading "Commission Comment"). Recommendations to the minister follow in Chapter Six: Conclusions and Recommendations.

Chapter Two
The Licensing Process and the Public Hearing

2.1 Licenses and Approvals

The Environment Act sets out the environmental review and licensing process for developments in Manitoba. Developments are designated as one of three classes in The Classes of Development Regulation (Manitoba Regulation 164/88), with Class 1 developments generally smaller and less complex and Class 3 generally the largest and most complex. The Harbour Colony wastewater lagoon was designated a Class 2 project. The regulation specifically classifies "wastewater treatment lagoons" as Class 2 developments. To obtain the licence, the project must be assessed in accordance with the process outlined in The Environment Act.

There are other parts of the larger colony project that require other approvals. These include: conditional use approval issued by the municipality having jurisdiction for overall land-use; specific aspects of the project such as for large livestock operations over 300 animal units; and groundwater use licensing. These other approvals are not part of The Environment Act licensing process, although larger groundwater use projects do require licensing.

2.2 Manitoba's Review Process

Harbour Colony submitted its EAP to the Environmental Approvals Branch of Manitoba Environment and Climate on August 8, 2023. The proposal contained information required in the Environment Act Proposal Report Guidelines, which lay out the kinds of information required in an EAP. According to these guidelines, environmental assessments typically contain the following:

- ***Executive summary***
- ***Introduction and background***
- ***Description of proposed development, including construction, operation, maintenance, and decommissioning, if applicable***
- ***Description of existing environment in the project area***
- ***Description of environmental and human health effects of the proposed development and mitigation measures***
- ***Follow-up plans, including monitoring and reporting***
- ***Conclusions***

Following receipt of the proponent's EAP, a TAC, comprised of representatives from the departments and branches of government responsible for the environment, natural resources, health, land-use planning, agriculture, infrastructure, municipal affairs and mining, was given the opportunity to provide comments on areas of potential concern. The process includes a determination on the potential to impact section 35 Treaty and Aboriginal rights and the need for Crown consultation and accommodation. The comments were placed on the public registry. The EAP was made available online and advertising was placed to invite the public to comment.

2.3 Community Engagement

The department held a Community Learning Session on June 4, 2025, at the Fraserwood Community Hall. The CEC was asked to assist by facilitating this session. The department presented information on the assessment and licensing process, wastewater treatment lagoons, and the Harbour Colony proposal. There was an opportunity for the public to ask questions. There were between 65–70 people in attendance.

2.4 Role of the Clean Environment Commission

The CEC is an arm's-length provincial agency established under The Environment Act to provide a forum for public participation in environmental decision-making. Its primary role is to ensure the protection of the environment by offering independent advice and recommendations to the Minister of Environment and Climate Change.

The Minister of Environment and Climate Change requested the CEC's participation by issuing a formal letter and Terms of Reference under the authority of The Environment Act.

The CEC's role in this process is to make recommendations and provide advice on possible environmental effects of the proposed installation and operation of the wastewater treatment lagoon. In making its determinations as to the effects of the project and its recommendations, the CEC relied on information received from many sources:

- ***The Environment Act Proposal (EAP)***
- ***The review by the Technical Advisory Committee (TAC)***
- ***Public comments submitted during the department's EAP review***
- ***Responses to two rounds of information requests (IRs) prior to the hearings***
- ***Technical experts retained by the CEC***
- ***Submissions and presentations provided during the hearing by the proponent, participants and the public***
- ***Testimony by expert witnesses and questioning of expert witnesses***
- ***Written presentations submitted by members of the public before and during the hearings***

The CEC was required, under the terms of The Environment Act, to submit its report to the minister within 90 days of the closing of the record for the hearings. In the case of a Class 2 development, such as the Harbour Colony lagoon, under The Environment Act, the director of the Environmental Approvals Branch is the usual decision maker, although the minister may make the licensing decision, after providing written notice.

After considering all information, the CEC concludes that potential environment impacts have been identified. Although there is some uncertainty regarding the potential significance of the impact the discharge of the lagoon will have on the immediate receiving waterways, these can be mitigated by monitoring and making changes to the operation of the development if required. The issue of nutrient loading on Lake Winnipeg is addressed in a section in Chapter Six: "Lake Winnipeg Nutrient Load".

2.5 Clean Environment Commission Panel

The panel assigned to conduct the public hearing on the Harbour Colony wastewater treatment lagoon consisted of Aimée Craft (CEC Chair), and Commissioners Donald (Don) Labossiere and Lydia Carpenter.

2.6 Public Participation

This report uses two terms to describe members of the public who took part in the process: participants and presenters. Participants are groups or individuals who applied to be and were substantially involved in the process, with approval of the panel. Participants took part in the pre-hearing process, during which they reviewed the proponent's EAP, and sought further information through two rounds of IRs. Participants are present throughout the hearing process and were represented by legal counsel. Participants can ask questions of the proponent and in turn, when participants present evidence, they can be questioned by the proponent. Participants often hire their own experts to review the proponent's EAP. The participant in this hearing process was the RM of Gimli. Presenters are any persons wishing to make a presentation to the panel who is not designated as a participant, including members of the public who present their views to the panel.

2.7 The Hearings

Hearings began on April 21, 2026, in Fraserwood and continued until April 23. An evening session of public presentations was held on April 22. The hearings began with a presentation from a representative of the Director of Environmental Approvals. Opening statements were made by representatives of the proponent and the participant. Next came presentations of the proponent and its technical specialist, who gave presentations on the project overview, permitting process, design and operation. The presentation by the proponent's technical specialist was followed by a period of questioning by the representatives of the participant, members of the panel and the public. Next, the CEC's technical expert gave a presentation on their technical reviews and answered questions from the participant. This was followed by presentations by the RM of Gimli which included their technical expert and the mayor of the RM, who were also questioned. Parties, the Panel and members of the public were given the opportunity to question all witnesses.

On the final day, closing addresses were delivered by the participant and the proponent. In addition to hearing 18 oral presentations from the public, the CEC received 13 written submissions. After the end of the hearings on April 23, the record was closed.

2.8 Information and Evidence on the Record

All information presented to the CEC during the hearings is available on the CEC's website (www.cecmanitoba.ca). This includes background documents, presentations, verbatim transcripts and written submissions.

Chapter Three
Wastewater Treatment

3.1 Overview

Wastewater is defined in The Environment Act as "the spent or used water of a community or industry which contains dissolved and suspended matter". In the common sense, you can think of anything that goes down the drain where you live, your kitchen sink, your toilet and your shower. Wastewater must be treated before it can be released back into the environment so as not to be an environmental or public health hazard. Treatment generally targets the removal of suspended and floatable matter, the treatment of biodegradable organics and the elimination of pathogenic organisms.

The treatment of wastewater is generally accomplished by building a process that deals with the contents in the wastewater. In simple terms, large matter can be removed or trapped, organics can be biodegraded by microorganisms and pathogens can be rendered inert. In the Manitoban context, this is generally done by either a sewage lagoon or a wastewater treatment plant. In some newer systems, additional treatment can be done on lagoon effluent prior to discharge.

Lagoons and treatment plants offer several advantages and disadvantages as shown in this chart from the CEC's independent technical review.

	Advantage	Disadvantage
Lagoons	Simple and passive process	Large land areas required
	No mechanical or electrical	Seasonal variability in performance
	Tolerance to variable flows and loads	Public concerns on open water treatment
	Storage capacity	Need to manage treatment and discharge times
	Low staffing requirements	
Treatment Plants	Smaller footprint	Power requirements and active controls
	Consistent effluent quality with steady input	Mechanical and electrical complexity
	Reduced reliance on weather/seasons	Higher operational and maintenance
	Continuous treatment and discharge	Need for highly trained and skilled staff
		Vulnerability to process upsets and failures

3.2 Wastewater Treatment in Manitoba

In Manitoba, a wastewater treatment facility is "Class of Development" under The Environment Act. An Environment Act License is required to construct and operate a wastewater treatment facility.

Manitoba and Canada prescribe treatment to a particular set of limits to protect the environment and public health, namely:

- ***Carbonaceous biological oxygen demand (cBOD, a measurement of the "strength of the wastewater") <25 mg/L***

- ***Total suspended solids (TSS, solids present) <25 mg/L, unless caused by algae***

- ***Fecal Coliforms or E. coli (as indicators to show proper disinfection) <200 organisms/100 mL***

- ***Unionized ammonia (toxic to fish) <1.25 mg/L***

- ***Total phosphorus (a key component of algae formation) <1 mg/L or a demonstrated nutrient reduction strategy for facilities discharging less than 820 kg/year of total phosphorus (a population equivalent of under 2000 people)***

Discharge can only take place between the dates of June 16 and October 31. Spring discharge is prohibited during fish spawning and fall/winter discharge is not permitted when temperatures are below freezing.

Facilities that treat wastewater from larger populations in Manitoba have a 1 mg/L phosphorus limit and a total nitrogen limit of 15 mg/L. These limits are prescribed in Manitoba Water Quality Standards, Objectives, and Guidelines which were adopted in law by The Water Protection Act in 2011.

Domestic sewage lagoons have been and continue to be a common method of treating domestic wastewater in Manitoba. According to the Department of Environment and Climate Change, Manitoba is home to nearly 350 licensed wastewater treatment lagoons. A brief review of the department's public registry of Environment Act Licenses files shows that at least since 2009, 130 lagoon licenses were issued (for new facilities or for making changes to existing facilities) with roughly half of them discharging into the Red River or Lake Winnipeg watersheds.

3.3 Wastewater Treatment and the CEC

Since its inception, the CEC has been extensively involved in examining the impact of wastewater treatment on the environment, with a focus on protecting Manitoba's watersheds. Over the last 40 years, the CEC has made numerous recommendations aimed at improving and/or phasing out certain practices, adopting limits for phosphorous and nitrogen, suggesting options for removal of nutrients, disinfection, and calling for immediate action to address sewer overflows.

In 2009 the CEC recommended strict total nitrogen and phosphorus limits on the City of Winnipeg's wastewater treatment facilities. In this same report, the CEC commented more generally on the need to enhance the management of and applicable criteria for septic fields, holding tanks and treatment lagoons.

"There is a need for regulatory initiatives that would establish reasonable criteria for better management of septic fields, holding tanks and treatment lagoons. Many of these systems are contributing nutrients and contaminants to the watershed. Evidence was presented to the Commission of poorly sited, installed, and maintained septic fields and holding tanks. Some lagoons are undersized and, as a result, require permission from Manitoba Conservation to make emergency

discharges. The nutrient management strategy should promote the regionalization of wastewater treatment and the phasing out of lagoon and septic systems wherever possible. Priority should be given to those systems that discharge directly into the Red River and Lake Winnipeg."

The CEC also reviewed wastewater impacts from industrial activities expansion in Portage la Prairie and Brandon in 2002 and 2003. The most recent domestic wastewater treatment lagoon hearing was held in 1994, for the then Village of Teulon, which discharged treated effluent to the Netley Creek which also drains into Lake Winnipeg. The CEC then recommended the facility be licensed, that discharge should meet or exceed Manitoba Surface Water Quality Objectives, that the lagoon be sampled on a regular basis and that a sampling program in Netley Creek both upstream and downstream of the discharge point be designed and implemented. The license required five years of monitoring in the watercourse.

The CEC has also held hearings on lagoons proposed from Shoal Lake (1988), Upland Colony Farms (1988), Airport Colony (1989), Norquay Colony (1989), Beausejour (1990), Whiteshell Colony (1990), St Claude (1990), Portage la Prairie (1990), Highway Gardens (1990) and Good Hope Colony (1992).

Chapter Four
The Harbour Colony Lagoon Proposal

4.1 Overview

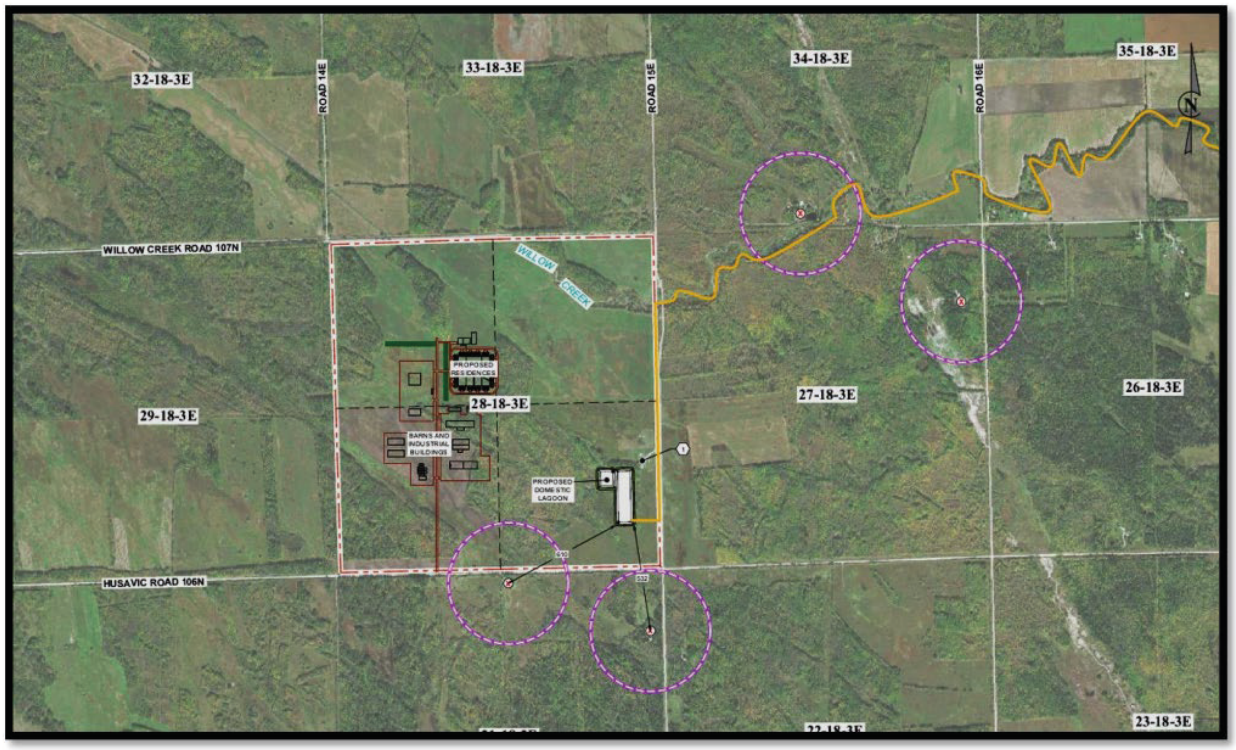
The Harbour Colony wastewater lagoon project is intended to treat and discharge the effluent generated by the Harbour Colony. Treatment of wastewater is required as it contains elevated levels of organics, solids and pathogens that can damage the environment. The proponent intends to construct and operate a two-celled domestic wastewater treatment lagoon. The lagoon will treat wastewater generated from a new colony development being constructed on SE 28-18-03 EPM in the RM of Armstrong. The new development is proposed to have a population of less than 250 people (although projections in the application have been made for a maximum number of 250) and include residences, a school, and communal buildings including a church, kitchen, and dining hall. According to the proponent's application and evidence, agricultural and light industrial activities on the site are proposed to include a truck wash and abattoir.

The lagoon is proposed to be constructed using a high-density polyethylene (HDPE) synthetic liner to maintain the required hydraulic conductivity (to contain the effluent until treatment is completed).

The proposed area of the colony development was described in a geotechnical assessment as a mixture of dense forest and open boggy areas with scattered bushes and grass. A sub-surface investigation using boreholes to depths ranging from 1.5 to 15.7 meters below grade noted that the general stratigraphy of soils was topsoil or peat overlying layers of sand, silt and clay, and/or silty clay which were underlain by silt till. Thickness of these layers varied across the site, with boreholes around the proposed lagoon having silt till at depth overlaid by various combinations or clay, silt and clay, and sand. Although some clay sufficient for use as compacted liner material was found, not enough was present to be able to construct a clay lined lagoon.

The proposed lagoon is located within the Willow Creek watershed. This watershed is roughly 1,210 square kilometers in size. In the local area of the colony site, the South Malonton Drain runs east along Rd 106N to Rd 15E where it turns north. It runs north along the west side for Rd 15E until it discharges into the Willow Creek. The Willow Creek from that point runs approximately 15 km until it reaches Lake Winnipeg. At the edge of Lake Winnipeg, the Willow Creek flows through the Husavik Wetlands.

The lagoon is proposed to discharge east to the Malonton Drain along Rd 15E where it will flow north to Willow Creek (see figure).



As part of their EAP, the proponent submitted a hydrologic and hydraulic assessment of the immediate area to assess the existing channel and culvert capacities in the area. It recommended drainage upgrades including culverts, limited reconstruction and drain maintenance to address capacity constraints. These works were authorized by approval to construct water control works under The Water Rights Act and a Provincial Water Infrastructure Permit under The Water Resources Act.

4.2 Comments and Concerns

Through the licensing process, approximately 100 public comments were received. The majority were from individuals; citizens associations and organizations, as well as from the RMs of Armstrong and Gimli. Comments included concerns about furthering impacts on Lake Winnipeg's water quality and associated impacts on property use, fishing and tourism activities, concerns about the proposed location (with specific concerns about it being low-lying and it and the surrounding area being prone to seasonal flooding and proximity to residences), monitoring and enforcement.

At the community learning session, many concerns were related to water quality impacts in the discharge waterway and impacts on domestic and recreational water use. Concerns were also expressed regarding the water quality of Lake Winnipeg and existing pressures on the Lake. There was also mention of noxious odours relating to the lagoon, and concerns about its placement and potential reliability of the system (including monitoring and compliance) and that the inclusion of wastewater from the proposed abattoir will result in increased impacts.

The written comments to the CEC included many of the same concerns but added concerns of the potential for groundwater impact, cumulative effects and "project splitting", the completeness of the environmental assessment, potential to impact fish habitat, jurisdictional issues, procedural fairness, lack of public or Indigenous consultation and municipal planning and by-law conflicts. The term "project splitting" refers to view components of large developments separately, so that the entirety of their impact is not viewed.

Through the hearing process the RM of Gimli's consultant expressed concerns about the proposed 1 mg/L discharge limit for phosphorus and other nutrients, the potential for the Willow Creek to be dominated by effluent during certain flow conditions and potential threats to fish spawning habitat.

Chapter Five
Environmental Considerations

5.1 The Lagoon

5.1.1 Discharge Limits

As discussed in Chapter Three, Manitoba and Canada have legislated discharge limits that must be met before treated effluent can be released from a wastewater treatment process. These are prescribed both in the Manitoba Water Quality Standards, Objectives, and Guidelines which were adopted in law by The Water Protection Act in 2011 and The Wastewater Systems Effluent Regulation under The Fisheries Act. These standards are meant to minimize environmental impacts to receiving watercourses. These discharge limits impose standards on carbonaceous biological oxygen demand, total suspended solids, fecal coliform or E. coli, unionized ammonia, total phosphorus and discharge date limits. Of these, phosphorus, and its potential to increase visible water quality impacts through providing food for algae blooms on Lake Winnipeg was the most common concern raised. The other was the potential for the effluent to impact Willow Creek, where nitrogen (including ammonia) could have the potential to harm aquatic life, namely fish, in the creek.

What We Heard: Discharge Limits

Numerous concerns were raised about the health of Lake Winnipeg and its continued eutrophication. Evidence was presented that both nitrogen and phosphorus can cause eutrophication in lake systems such as Lake Winnipeg. The panel heard evidence from the department that all wastewater treatment facilities such as lagoons must meet a phosphorus limit of 1 mg/L or have a demonstrated nutrient reduction strategy. This is the same discharge limit that are required to be met by all wastewater treatment plants. The panel also heard evidence that the Nutrient Target Regulation under The Water Protection Act gives Lake Winnipeg a target phosphorus level of 0.05 mg/L and that a discharge standard of 1 mg/L is incompatible with those goals. In the RM of Gimli's expert report and in testimony, they spoke of Ontario which has established a phosphorus limit for wastewater discharges of 0.5 mg/L to address cumulative loading goals in Lake Erie.

There were also discussions on the maximum rate at which treated effluent can be discharged from the lagoon. Maximum discharge flow is generally controlled by operating a gate valve, with no specific way of precisely metering the flow. Mitigation measures such as the installation of an orifice on the lagoon discharge pipe that would limit the maximum potential rate of discharge were raised.

Commission Comments: Discharge Limits and Discharge Flow Rate

The department has regulated effluent discharge limits. While there is ongoing scientific debate regarding complex policy

issues such as discharges to water bodies, the panel believes that site-specific limits are not appropriate for this facility. Any potential changes to discharge limits must be appropriately assessed and implemented equitably throughout the regulatory landscape. Any changes to the provincial discharge limits should be subject to public comment and input, and be implemented with an appropriate timeline giving existing system operators the ability to implement whatever changes are necessary to comply. Of course, any wastewater treatment operator or licensee may choose to do more than the required regulatory standard, but that would be a discretionary choice to exceed the regulatory requirements.

Evidence from the proponent's expert discussed a way to control the rate discharge, using a means of limiting the flow from the discharge pipe.

RECOMMENDATION: Standard lagoon discharge limits for carbonaceous biological oxygen demand, bacteria, unionized ammonia, total phosphorus and discharge dates should be included as licensing conditions.

RECOMMENDATION: A method of limiting or controlling the maximum flow rate of discharge should be included as a licensing condition.

5.1.2 Emergency Discharges

Although the term was not expressly defined in the hearing record, an emergency discharge is the authorized release granted to discharge lagoon effluent when it does not meet discharge terms and conditions in an Environment Act License. Circumstances under which an emergency discharge may arise may be in cases of hydraulic overloading of a lagoon due to extreme wet weather, organic overloading, or a need to lower lagoon levels prior to winter so that the lagoon can assume a winter load. The Environment Act allows under section 18(1) for the suspension or variation of a license issued under the act in extraordinary circumstances. An emergency discharge is an extraordinary circumstance. Although the act allows the minister to authorize the variance of a licence in these circumstances, this authority is also delegated to Directors appointed pursuant to the act under an Order in Council. Emergency discharges have historically been granted for sewage lagoons that are at risk of overflowing to protect the integrity of the infrastructure, as the loss of the lagoon far outweighs the environmental harm posed by the controlled discharge they allow, or could potentially reduced the environmental harm caused by an overflow.

What We Heard: Emergency Discharges

The RM of Gimli's expert submitted that emergency discharges should not be allowed to take place from the facility, given the hydraulic connection to the creek. She discussed alternative measures, including emergency planning, which could be prepared to detail how the proponent intends to deal with situations where the lagoon cannot meet discharge limits. These could include trucking effluent to an alternative treatment location or tertiary treatment. The proponent's expert also spoke on the ability to develop emergency plans, in advance of an actual emergency. These alternative measures to emergency discharge included using the 1 meter of freeboard incorporated in the lagoon design as additional storage, sump pump discharge water from the colony buildings could be directed away from the wastewater collection system when lagoon levels are high, water conservation measures and that irrigation of treated effluent onto proponent owned land could all be possible.

Commission Comments: Emergency Discharges

Section 18(1) allows for appropriate action to be taken should the need arise. Having plans in place before emergencies happen is an appropriate risk management tool. As a condition of the licence, the proponent should be required to develop emergency plans to address the potential occurrence that the lagoon cannot meet discharge limits. Options should be thoroughly investigated and planned. Options should include a multi-pronged approach and a well thought out and documented plan that would account for various emergency scenarios and outcomes. Given that emergency situations are complex, single source solutions are not appropriate, and tiered emergency response plans are required. Examples that were provided throughout the hearing included trucking waste to an offsite treatment location, irrigation, tertiary treatment, dosing alum or measures to reduce the load on the lagoon.

It is in the proponent's and the public's interest to outline a strategic emergency discharge plan that takes into consideration various infrastructure shortcomings and challenges that may exist during various emergency scenarios including flooding, drought, emergency evacuation or critical failure points. Such a plan should also include key person continuity planning or an emergency succession plan in case trained on site operators are not available. This can include redundancy in training of colony members or a strategy to manage operator absence. If discharge limits related to organic loading issues occur, the higher strength wastewater sources like the abattoir wastewater should be diverted to an alternative treatment location. These are all issues that need to be addressed in an appropriate emergency plan. These plans should be submitted to the department for approval.

A prohibition on emergency discharges imposed as a license condition is not a viable option given the wording of The Environment Act, and is not in the public interest. Emergency discharges should be a last resort in any emergency plan and should require a public notice requirement.

The department must ensure it is exercising due diligence when utilizing section 18(1) and should impose appropriate restrictions and requirements on any license holder to mitigate and prevent environmental impacts given the overall situation, and where appropriate, require actions to be taken to prevent the emergency occurring in the future.

RECOMMENDATION: Appropriate emergency plans to address non-compliant effluent discharges must be developed by the proponent and submitted to the department for approval. Once approved, these plans should be posted in the public registry. The approval to suspend any clause of an Environment Act License must be done with strong considerations to prevent and/or mitigate environmental impacts given the overall situation.

RECOMMENDATION: In instances where extraordinary circumstances warrant an alteration to or suspension of some of the requirements of a licence, an immediate public notice mechanism should be in place.

5.1.3 Flooding and Drainage

What We Heard: Flooding and Drainage

The CEC heard public concerns regarding drainage and flooding in the area. Photos were submitted showing overland flooding across roads in the immediate area of the proposed lagoon site and adjoining roads and ditches. Concerns raised included the potential for the lagoon to be impacted by flood conditions, as well as the potential for

the lagoon to contribute to flood conditions with its discharges, exacerbating flooding. The proponent, in response to a TAC comment commissioned Trek Geotechnical to conduct a flood level assessment titled "Crystal Springs Colony - New Colony Development 200-Year Flood Level Assessment". This report indicated that the 200-year flood level at the location of the proposed lagoon would be 248.06 meters. The design plans for the lagoon indicate that the lagoon berms will have an elevation at the top of the berms of 248.50 meters. It was noted that this is 0.7 meters of freeboard above the 100-year flood level specified in the Gimli Zoning By-Law and 0.44 meters of freeboard above the 200-year flood level. The proposed lagoon size allows for increased storage if the 1-meter freeboard capacity is utilized.

Many of the pictures of overland flooding in the immediate area were during spring conditions, when drainage routes are often clogged with ice, restricting flows and backing up water contributing to overland flooding. These types of conditions would likely have ended prior to a typical earliest lagoon discharge (June), and it is extremely unlikely that freshet conditions would exist at that time. A standard lagoon license also restricts discharge when flooding from any cause is occurring along the discharge route.

Commission Comment: Flooding and Drainage

The panel determines that the proposed lagoon berm height is sufficient to mitigate the risk of lagoon overtopping. The proposed design achieves a flood protection standard greater than a 1-in-200-year flood event. There is also minimal concern regarding discharge contributing to flooding given that regional overland flood conditions that were identified are unlikely to exist when a license would allow for discharge. The standard lagoon licensing conditions of prohibiting discharge when flooding is occurring downstream is appropriate to address this concern. If localized flooding was present, the discharge could be delayed as additional storage capacity exists in the design, or the emergency plan (discussed above) could be engaged.

5.1.4 Air Quality/Odours

The proponent's proposal states that increased dust is expected during construction, and that dust can also pose visibility problems on roads. Proposed mitigation measures include specific working hours and dust reduction materials and practices, proper signage and vehicles in good working order to minimize traffic risks.

Odours can be associated with sewage lagoons. Typically, this occurs during spring and fall, when the ambient air temperature warms or cools the surface of the lagoon causing the upper water to turnover or mix with the lower water at a different temperature and density, mixing the overall water volume. Odours can also be associated with sewage lagoons if they become organically overloaded. This nuisance odour can cause several minor health effects such as headaches, eye irritation, and respiratory problems. The proponent submits that the proposed organic loading of the lagoon is approximately half of the maximum allowed in provincial design objectives which should minimize the potential for odours. They state that a proposed tree line and distance of separation from the nearest residences, ensure that no adverse effects on nearby residents are anticipated. The lagoon will be monitored by a trained operator to ensure proper functioning, and if excessive odour is noticed the cause will be identified and dealt with accordingly. If odors are reported to the department, they will be communicated to the proponent and investigated by the department.

What We Heard: Air Quality/Odours

Throughout the process, public comments raised odour as a concern associated with the proposed lagoon, particularly due to its proximity to residences and prevailing wind directions that residents believe would carry odours toward nearby homes and communities. Commenters challenged the EAP's characterization of odour as limited or temporary, noting that odour events described as occurring "only" during spring and fall would still represent a substantial portion of the year and coincide with periods of outdoor use. Submissions questioned the absence of clear, enforceable criteria defining "excessive odour," the lack of objective measurement or monitoring standards, and uncertainty regarding who would determine compliance and respond to complaints. Odour was frequently linked to potential human health effects (e.g., headaches, eye and respiratory irritation), reduced quality of life, and perceived impacts on property values, and was often described as part of a broader set of cumulative nuisance effects when considered alongside other parts of the overall colony development.

Commission Comment: Air Quality/ Odours

The panel is of the opinion that the potential for odour is minimized with the overdesign of the lagoon when compared to the provincial minimum requirements.

5.1.5 Public Notification

Standard license conditions for wastewater treatment facilities in Manitoba do not require reporting of discharge dates or testing results.

What We Heard: Public Notification

The panel heard concerns about the need for public notification regarding the operations of the proposed lagoon. For example, local residents were interested in being advised of the dates when the discharges will be taking place. They also wanted to be informed of testing results prior to discharge.

Commission Comment: Public Notification

The panel feels that the public has a right to know that licensed developments in their areas are meeting license conditions. In one of the department's IR responses, they mentioned Bill 37, The Environmental Statutes Amendment Act, new legislation that would amend The Environment Act to allow the public posting of monitoring, inspection and compliance data on the public registry. We strongly agree with this proposed legislative amendment.

However, standard license conditions only require retention of such records for a period of time, not submission to the department. Therefore, in this and other cases, an appropriate means of communication of discharge events and testing results is appropriate.

RECOMMENDATION: That Bill 37, The Environmental Statutes Amendment Act, be passed, particularly the sections relating to public posting of information on the public registry.

RECOMMENDATION: An appropriate means of communicating information regarding this license be established and implemented.

5.1.6 Groundwater Impact

The department's design objectives for sewage lagoons state they must be constructed with materials to provide containment. This can be accomplished by either soil materials, typically clay 1 meter in thickness with a hydraulic conductivity of 1 x 10-7 cm/s, or a synthetic liner.

What We Heard: Groundwater Impact

Concerns were raised by the public during The Environment Act process and during the hearing on the potential risks of groundwater contamination from a lagoon. The participant's consultant submission during the hearing also raised concerns including the potential that discharged effluent could impact groundwater over time. The proponent did have Friesen Drillers conduct a "Desktop Hydrogeological Review" as part of their EAP and Trek Geotechnical did prepare a report "Crystal Springs Colony Community Development Geotechnical Report" which included 23 logged boreholes and 6 logged test pits although these were generally for geotechnical purposes.

Commission Comment: Groundwater Impact

The lagoon has been designed with a synthetic liner made of 60 MIL thick HDPE. This provides adequate containment consistent with the design objectives required by the department. The proponent representative provided evidence that the gas venting system installed under the lagoon liner can also be used for monitoring any leaks. These standard design features are satisfactory to address the potential for groundwater impacts.

5.1.7 Greenhouse Gases

In The Environment Act, greenhouse gases are defined as carbon dioxide, nitrous oxide and methane. The act requires that when considering a proposal, the director or minister take into account the amount of greenhouse gases to be generated by the development and the energy efficiency of the development. A civil construction project such as the construction of a lagoon will utilize heavy equipment to prepare a site and move earth, generally using diesel fuel to do so, thus generating some greenhouse gas emissions. Wastewater treatment also creates greenhouse gases such as methane released by the action of anaerobic bacteria and nitrous oxides formed during the nitrogen removal process.

What We Heard: Climate and Greenhouse Gas Emissions

Public comments raised concerns that greenhouse gas emissions and climate change impacts associated with the proposed lagoon, livestock operations, construction activities, and vegetation clearing were not adequately assessed. Commenters did not accept that the project would have no significant climate impacts. They identified wastewater lagoons and livestock as sources of methane and carbon dioxide, and highlighted construction-related emissions and loss of carbon-sequestering vegetation. Submissions requested quantification of the project's carbon footprint and clarification of mitigation measures to address increased greenhouse gas emissions.

Commission Comment: Climate and Greenhouse Gas Emissions

The CEC agrees that the construction and operation of a sewage lagoon will generate greenhouse gases. In the context of The Environment Act those emissions must be considered as part of the overall evaluation of the project. However, as a standalone issue, the panel does not consider the greenhouse gas emissions of a development such as this as significant.

Standard wastewater treatment techniques either through lagoons or sewage treatment plants are assumed to generate the same gases because of treatment. Although some mitigation of gases may occur at large wastewater treatment plants (flaring of methane for example) such a process is not proposed, and likely not a viable option in the circumstances.

5.1.8 Project Alternatives

A sewage lagoon is the proposed means of treatment of wastewater from the new colony. During the course of the hearing, there were comments made regarding alternatives including the use of an on-site wastewater treatment plant or connecting to the RM of Gimli's existing wastewater treatment plant via a pipeline.

Commission Comment: Project Alternatives

An alternative analysis is beyond the scope of this hearing and there was no evidence on the record to support the CEC making any findings on this topic.

Furthermore, the panel notes that the discharge standards for a sewage lagoon are the same as those for a sewage treatment plant (Manitoba Water Quality Standards, Objectives and Guidelines Regulation under The Water Protection Act). General advantages and disadvantages of both systems are noted in Chapter 3.1. Based on the same discharge standards, the panel sees no obvious environmental benefit in one compared to the other.

5.1.9 Traffic

The project proposal notes that increased noise and vehicle traffic is expected during construction, and that noise pollution may be a nuisance to nearby residents. Dust and vehicles could pose a more dangerous threat with reduced visibility and minor health issues. Proposed dust and noise mitigation measures include proper construction methods including specific working hours and dust reduction materials and practices, proper signage and vehicles in good working order to minimize traffic risks.

5.1.10 Livestock Operations

The RM of Gimli and presenters referenced additional livestock operations that will take place on the Colony. While these activities are not contemplated by this license application for a domestic wastewater lagoon, some of the water from a domestic use abattoir is proposed to be directed to the lagoon. The proponents indicated that any commercial processing will take place off-site. It should be clear in the license conditions that commercial wastewater processing is not permitted.

RECOMMEMDATION: As a license condition, commercial wastewater processing should not be permitted.

5.2 Willow Creek

In addition to the concerns raised about the sewage lagoon design and operation, concerns were raised regarding the impact of the project on the receiving watercourse, Willow Creek.

According to the Willow Creek Integrated Watershed Management Plan published in 2012 by the East Interlake Conservation District (the watersheds designated Water Planning Authority under The Water Protection Act) half of Willow Creek, or nearly 10 kilometres is classified as Class A and B fish habitat, indicating high quality fish habitat including spawning for pike and walleye. The panel also heard from residents who live on Willow Creek and others who use it for recreational uses including kayaking and swimming.

While there is a downstream monitoring station 10km from the proposed discharge point, there is currently no existing baseline data for Willow Creek above-stream of the proposed discharge. Furthermore, there is no contemplation of cumulative effects related to other discharges into the Creek either up or downstream considered as part of the environmental assessment of the proposed project.

5.2.1 The Potential for Impact to Willow Creek

What We Heard: The Potential for Impact to Willow Creek

Concerns were raised regarding situations when low flow in the Willow Creek could allow for what the RM of Gimli's expert termed "effluent dominance", when a significant portion of the creek flow could be treated effluent, as opposed to water coming from upstream. Evidence was presented that nitrogen in the effluent, namely ammonia can have a detrimental effect on aquatic life by causing harm to fish. Nutrients like nitrogen and phosphorus can also reduce the dissolved oxygen content of the waters, again causing harm to fish. On cross examination, RM's expert did state that the rocky creek bed can contribute to oxygen diffusing into the water but could not be quantified.

Commission Comment: The Potential for Impact to Willow Creek

The public record and hearing process did not result in definitive information on the potential impacts to Willow Creek, given the absence of monitoring data. The panel feels that the establishment of a thorough monitoring program on Willow Creek would be the best way to determine and quantify the effects that effluent discharge would have on it, and for the department to be in an informed position to impose additional license conditions should the impacts warrant them.

Such a monitoring program should include monitoring points both upstream of the discharge location, the effluent itself, at some point shortly downstream of entry into Willow Creek (possibly its crossing at Road 16E), further downstream (possibly the crossing at Road 18E) and incorporate the existing monitoring location at its crossing at PTH 8. Testing should be undertaken when discharged effluent has reached those locations. Testing should be conducted for fecal coliform or E. coli, ammonia, dissolved oxygen, total nitrogen and total phosphorus.

The public has requested access to the results of this monitoring program. If Bill 37 allows for this type of information to be posted publicly, then is should. If it does not, then an alternative means to do so must be utilized. It would be most appropriate for the department to undertake this monitoring program itself, rather than requiring it of the proponent. The department conducting the monitoring itself and ensuring the results are shared publicly will decide the appropriate amount of transparency warranted to this issue. The department might also choose to engage the public in programs of citizen monitoring to help facilitate the collection of samples and data. Five years of monitoring during discharges aligns with previous CEC recommendations and an annual review and analysis of results should be posted on the public registry.

Should this monitoring program indicate that significant adverse effects on Willow Creek warrant an alteration of the license to mitigate these impacts, those alterations would constitute an amendment to the licence. This could include discharge limitations when low flow exists in Willow Creek. It may also be appropriate to engage in some type of public consultations about proposed mitigative actions.

RECOMMENDATION: The department should develop and implement a monitoring program for Willow Creek to assess the effects that effluent discharge has on it. This monitoring program should take place for five years, occur during discharge events, and the results should be shared publicly.

RECOMMENDATION: If the monitoring program results demonstrate significant impacts, adaptive management strategies should be considered, along with any necessary amendments or additional conditions to the license.

5.3 Law, Policy and Water Protection

5.3.1 Audits of Wastewater Facilities and Their Discharges

The panel acknowledged the benefit of legislative changes to The Environment Act that will include more information in the public registry, as proposed in Bill 37. However, this hearing has shown that there is a degree of mistrust from the public on the performance of wastewater treatment systems. The department should conduct routine audits of wastewater systems with the monitoring results posted publicly. Annual targets of 5-10% of facilities would seem to be appropriate. This would improve transparency and demonstrate compliance with respect to wastewater treatment in Manitoba.

RECOMMENDATION: The department should audit 5-10% of facilities discharging treated effluent a year and post those results publicly.

5.3.2 Integrated Watershed Management Plans

Integrated Watershed Management Plans (IWMP) are a requirement under The Water Protection Act. However, through this process it is not clear how they tie into licensing or government policy decisions. The IWMP for this watershed talked about a goal of a 10% reduction in nitrogen and phosphorus concentrations and/or loading in the Willow Creek and Fish Lake Drain and this proposal does seem to not align with that plan. The department needs to establish clear publicly facing policies detailing how IWMPs interact with the licensing and other regulatory processes.

RECOMMENDATION: The department should establish clear guidance on how IWMPs interact with the licensing and other regulatory processes.

5.3.3 Lake Winnipeg Nutrient Load

The cumulative effects of treated sewage effluent being discharged into the Lake Winnipeg watershed was a common concern. There was much discussion on the 1.0 mg/L phosphorus discharge limit and the misalignment of the 0.05 mg/L phosphorus target for Lake Winnipeg. One is a discharge limit, generally imposed on treated wastewater discharge in Manitoba. The other is a regulated target for the overall health of the lake. While the CEC takes the lake target seriously, it cannot recommend imposing it on one proponent as a condition of a licence. We do however see merit in the development of an overall strategy to help achieve the target, including measures relating to the effluent discharge limits.

The department has stated there are over 350 sewage lagoons in Manitoba, in addition to the number of wastewater treatment plants. The panel cannot make comment if current wastewater treatment standards would allow Manitoba to reach the nutrient targets established for Lake Winnipeg, but this is an appropriate consideration that the government must monitor and make regulatory and/or policy changes if required. We recommend that this process takes place publicly. The cumulative effects and dynamics of nutrients on Lake Winnipeg are an important public concern, and Manitoba must act diligently to ensure accountability on this important issue.

The use of cumulative effects assessment in The Environment Act licensing process would also assist with this. The act requires the director to issue a license with such specifications, limits, terms and conditions as they deem necessary to ensure effective environmental management. The panel feels that such effective environmental management decisions must include cumulative effects considerations where appropriate. The CEC has repeatedly made recommendations in past reports about the need for cumulative effects assessment in environmental assessment including in the 2007 report on the Pembina Valley Water Cooperative Supplemental Groundwater Supply System and the 2013 report on the Bipole III Transmission Project.

RECOMMENDATION: The Manitoba government should develop an overall strategy to help achieve the nutrient target for Lake Winnipeg and other water bodies, including measures relating to the effluent discharge limits.

RECOMMENDATION: Amend The Environment Act to explicitly include cumulative effects as part of environmental assessment and project evaluation.

5.3.4 Transparency in the Process(es)

Certain presenters raised important concerns about the process of environmental evaluation. They were concerned with the lack of integrated decision-making regarding different aspects of an overall development like the proposed Colony. While much of the development activities are outside of the scope of the CEC's terms of reference and mandate, they remain part of the footprint of the Colony.

Larger more complex projects like the establishment of a new Hutterite colony requires various levels of approvals. This can in include zoning changes, conditional use, building permits, groundwater use permits, drainage permits, etc. These approval processes do not function in a connected manner, many operate independently from each other, even though they all deal with the same overall project.

The licensing process under The Environment Act has several opportunities for the public to provide input. The public is made aware of proposals with advertising in local newspapers and the proposal being posted on the public registry where it is accessible for review. There is a public comment period where comments can be made regarding the proposal. In this proposal, approximately 100 public comments were received. When the CEC is asked to conduct a hearing, there is an opportunity for written public submissions in advance of a hearing, and the opportunity to provide public comments and question the proponent as part of the hearing. In this proposal, 13 written comments were received and 18 people spoke publicly.

What We Heard: Fragmented Approvals and Transparency in the Process(es)

Presenters expressed concerns that not looking at the entire colony was "project splitting".

Notwithstanding the public participation that occurred, there were public concerns expressed regarding transparency in the process. The panel believes that some of this concern comes from the variety of processes and approvals that are involved in the establishment of such things as a new Hutterite colony, and the fact that a significant amount of construction has taken place to date on the overall Colony establishment. An Environment Act License is only one of the required approvals. Although the department mentions a "one window approach", this is only with respect

to the assessment and licensing process under the act, not any other approvals. A presenter referred to the Manitoba Law Reform Commission's, Consultation Report - Manitoba's Environmental Assessment and Licensing Regime under the Environment Act, and suggested that its recommendations be reviewed and implemented in order to improve environmental assessment and environmental decision-making in Manitoba.

Commission Comments: Fragmented Approvals and Transparency in the Process(es)

The panel acknowledges that the terms of reference for this hearing were for the sewage lagoon servicing the colony.

Significant construction of residential and communal buildings has already taken place; we assume they were granted the appropriate approvals by the municipality.

The panel was made aware of an outstanding conditional use application for the colony for the establishment of a poultry livestock operation. This is one of many approvals required for such a project to go ahead, but many happen at various stages of the project and operate independently of the other.

A Hutterite colony, which is in fact a community with commercial activities does not undergo a holistic assessment. This gap in Manitoba's assessment process should be reviewed.

There is a need to show the public all the processes and approvals involved in larger projects such as this and how the public can be aware of and contribute to them. Special consideration needs to be given to improving project mapping, communication, transparency and public understanding of applicable approval processes.

RECOMMENDATION: Review and amend The Environment Act. This review should specifically address Impact Assessment and the process for and criteria associated to evaluating impact. It may be appropriate to develop a stand-alone Impact Assessment Act.

RECOMMENDATION: The department should consider developing guidance documents outlining various provincial licensing, permitting and approval processes, as well as common federal and municipal processes, which can be easily accessed by the general public.

Chapter Six
Conclusion and Recommendations

The CEC is of the view, based on the evidence available on the record, that a licence should be granted to the proponent, subject to certain conditions. Standard lagoon discharge limits should apply. However, some additional monitoring should be required for the project to proceed. Our reasoning is that the potential impacts to the receiving watercourse, Willow Creek are not well understood. A straightforward monitoring program implemented by the department can quantify these impacts and identify required changes, should they warrant additional conditions or limits. It should be technically simple to impose a mechanism to restrict the effluent discharge flow to a particular limit, and such a mechanism should be required in the license. Appropriate emergency planning should be developed and submitted for approval by the department to ensure that mitigation measures are understood and planned as a preventative measure. There should be a means of communicating information regarding the operation of this facility to the public. The department should audit a 5-10% of facilities discharging treated effluent a year. There needs to be clear guidance on how IWMPs interact with the licensing and other regulatory processes. Potential gaps in the environmental assessment process should be reviewed and a means of documenting approvals required for a variety of projects should be developed. We also recommend that The Environment Act be amended to explicitly include cumulative effects as part of environmental assessment and project evaluation, and that impact assessment and standards be clearly laid out in legislation.

We thank all of those who took the time to consider the project, express their concerns and provide their information and opinions to the CEC through the hearing process. We also want to thank the proponent for the presentation of their information and the willingness they displayed in developing measures to address some of the concerns that were raised. Our panel is encouraged to think that ongoing dialogue and enhanced opportunities to communicate and work alongside each other to protect the environment, watersheds and other-than human relatives will ultimately be to our collective benefit.

The CEC therefore recommends that:

1) Standard lagoon discharge limits for carbonaceous biological oxygen demand, bacteria, unionized ammonia, total phosphorus and discharge dates should be included as licensing conditions.

2) A method of limiting or controlling the maximum flow rate of discharge should be included as a licensing condition.

3) Appropriate emergency plans to address non-compliant effluent discharges must be developed by the proponent and submitted to the department for approval. Once approved, this plan should be posted

in the public registry. The approval to suspend any clause of an Environment Act License must be done with strong considerations to prevent and/or mitigate environmental impacts given the overall situation.

4) In instances where extraordinary circumstances warrant an alteration to or suspension of some of the requirements of a licence, an immediate public notice mechanism should be in place.

5) That Bill 37, The Environmental Statutes Amendment Act, be passed, particularly the sections relating to public posting of information on the public registry.

6) An appropriate means of communication information regarding this license should be established and implemented.

7) As a license condition, commercial wastewater processing should not be permitted.

8) The department should develop and implement a monitoring program for Willow Creek to assess the effects that effluent discharge has on it. This monitoring program should take place for five years, occur during discharge events and the results shared publicly.

9) If the monitoring program results demonstrate significant impacts, adaptive management strategies should be considered, along with any necessary amendments or additional conditions to the license.

10) The department should audit 5-10% of facilities discharging treated effluent a year and post those results publicly.

11) The department should establish clear guidance on how IWMPs interact with the licensing and other regulatory processes.

12) The Manitoba government should develop an overall strategy to help achieve the nutrient target for Lake Winnipeg and other water bodies, including measures relating to the effluent discharge limits.

13) Amend The Environment Act to explicitly include cumulative effects as part of environmental assessment and project evaluation.

14) Review and amend The Environment Act to specifically address Impact Assessment and the process for and criteria associated to evaluating impact. It may be appropriate to develop a stand-alone Impact Assessment Act.

15) The department should consider developing guidance documents outlining various provincial licensing, permitting and approval processes, as well as common federal and municipal processes, which can be easily accessed by the general public.

Appendix A:
Terms of Reference

CLEAN ENVIRONMENT COMMISSION
ON THE HARBOUR COLONY WASTEWATER LAGOON PROJECT

Minister of Environment and Climate Change
Minister responsible for Efficiency Manitoba
Legislative Building, Winnipeg, Mani oba R3C 0V8 CANADA

Aimée Craft
Chair
Clean Environment Commission
305-155 Carlton Street
Winnipeg MS R3C 3H8
Aimee.Craft@gov.mb.ca

SEP 1 2 2025

Dear Aimée Craft:

In accordance with section 6(5) of The Environment Act, I hereby request the Clean Environment Commission to conduct a public hearing regarding the proposed Crystal Spring Colony domestic wastewater treatment lagoon.

I am requesting that the Clean Environment Commission public hearing and review process begin as soon as possible. 1 have provided a review mandate and terms of reference as enclosed. Additionally, in accordance with section 7(3) of The Environment Act, 1 am requesting a final report with recommendations, including licensing conditions, be provided by February 28, 2026. The Clean Environment Commission may ask for clarification on this request at any time.

Please contact Agnes Wittmann, Director, Environmental Approvals Branch, at EABDirector@gov.mb.ca or 204-945-8321, regarding information obtained through the environmental assessment process should you wish to discuss this request further.

Kind Regards,

Original signed by

Honourable Mike Moyes

Enclosure
c. Agnes Wittmann

bc. Jocelyn Baker
Shannon Kohler
Siobhan Burland Ross
Matt Popowich
ECESD25-00043

Terms of Reference

Clean Environment Commission Review of Crystal Spring Colony Wastewater Treatment Lagoon Proposal

Background

On August 17, 2023, Crystal Spring Colony submitted an Environment Act Proposal for the construction and operation of a wastewater treatment lagoon for their community located in the Rural Municipality of Armstrong.

The proposal includes an environmental assessment report prepared by an engineering consultant in accordance with Manitoba's guidelines for the design of wastewater treatment lagoons.

During the public comment period, requests for a Clean Environment Commission (CEC) hearing were made by members of the public. The director of Environmental Approvals Branch decided not to recommend to the Minister of Environment and Climate Change that a CEC hearing be held because the concerns raised can be addressed in the design of the facility and the standard terms and conditions of an Environment Act Licence.

Seven appeals were filed with the Minister appealing the director's decision not to recommend a CEC hearing. Due to the additional public concerns raised during the appeal process, as well as during a community learning session held on June 4, 2025, the CEC is being requested to conduct a public hearing on the proposal.

Public hearings provide an opportunity for citizens to exercise influence over the quality of their living environment, which aligns with overarching intent of The Environment Act, to protect and maintain the environment in a manner which sustains a high quality of life for present and future generations.

Mandate of the Review

ln accordance with section 6 (5) (b) of The Environment Act, the CEC, at the request of the Minister of Environment and Climate Change, shall conduct a public hearing to consider the potential environmental and public health effects of the proposed Crystal Spring Colony wastewater treatment lagoon.

The CEC shall conduct the hearing in general accordance with its Process Guidelines Respecting Public Hearings.

The CEC will provide advice and recommendations to the Minister in the form of a report pursuant to section 7(3) of The Environment Act and in accordance with the following terms of reference.

Terms of Reference

1. The CEC will conduct a public hearing relating to The Environment Act proposal and the environmental assessment report and provide advice and recommendations to the Minister regarding potential environmental effects of the proposed wastewater treatment lagoon.

2. The CEC will provide members of the public the opportunity for input regarding the Crystal Spring Colony wastewater treatment lagoon proposal as part of the public hearing in a location consistent with the affected community.

The CEC review process should begin immediately and be completed as soon as possible.

The CEC's final report with recommendations, including licensing conditions, should be provided by February 28, 2026.

Appendix B
Presenters

Arnason, Judy	***Private***
Book-Smith, Kathleen & Smith, Doug	***Private***
Buckels, William	***Private***
Burns, Daniel	***Burns Maendel Consulting***
Burns, Vicki	***Private***
Chudd, Kevin	***Mayor of Gimli***
Flores, Sheri	***Private***
Gulay, Glen	***Private***
Jantz, Rob	***Private***
Kalinovich, Indra	***Dillon Consulting***
Kristjanson, Chris	***Private***
Kristjanson, Robert	***Private***
MacKenzie, Alex	***Private***
MacKenzie, Carson	***Keewatin-Aski LTD.***
Mastin, Gail	***Gimli Environmental Advisory Committee***
Milne, Chris	***Private***
Mishtak, Tanya	***Private***
Shaw, Lisa	***Private***
Sagan, Barsha	***Manitoba Environment and Climate***
Tkach, Rob	***Private***
Veldink, Fred	***Private***
Wasylowski, Garry	***Reeve, RM of Armstrong***
Webber, Randy	***Private***
Yablonski, Jeff	***Private***

Appendix C
Written Submissions Received

Champagne-Shapiro, Susan	***Public***
Flores, Felipe	***Public***
Flores, Sheri	***Public***
McLean, Sam	***Public***
Mishtak, Tanya	***Public***
Narth, Konrad	***MLA, La Verendrye***
Scott, Ron and Patricia	***Public***
Smith, Barbara	***Public***
Smith, Laura	***Public***
Thorsteinson, Inga	***Public***
Tkach, Rob	***Public***
Van Mil, Grace	***Public***