

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: Horizon Hutterite Holding Co. Ltd.
PROPOSAL NAME: Horizon Hutterite Holding Co. Ltd. -
Domestic Wastewater Treatment Lagoon
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon–Waste/Scrap
CLIENT FILE NO.: 5566.00

OVERVIEW:

On January 27, 2012 the Department received a Proposal from South-Man Engineering on behalf of Horizon Hutterite Holding Co. Ltd. for the construction and operation of a new domestic wastewater treatment lagoon located in the northeast quarter of Section 35-3-2 WPM in the Rural Municipality of Rhineland, to serve the Horizon Colony. The proposed development will consist of the construction of a new primary cell and a new secondary cell. Treated effluent from the wastewater treatment lagoon will be trickle discharged between June 15th and November 1st of any year into a field drain which will carry the effluent into Boundary Creek. The effluent will then flow east in the Boundary Creek approximately 14.5 km before it reaches the Plum River and Red River.

On February 23, 2012 Manitoba Conservation and Water Stewardship placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Millennium Public Library, the Manitoba Eco-Network, and the R.M. of Rhineland Municipal Office. Copies of the Proposal were also provided to the Canadian Environmental Assessment Agency (CEEA) and the Technical Advisory Committee (TAC) members. The Department placed public notification of the Proposal in the Altona Red River Valley Echo on Friday, March 2, 2012. The newspaper and TAC notifications invited responses until March 30, 2012.

On April 17, 2012, Manitoba Conservation and Water Stewardship forwarded requests for additional information from the TAC to the proponent's consultant. On May 7, 2012, the consultant submitted responses to the comments and requests from the TAC.

On May 10, 2012, the consultant's responses were distributed to the participating TAC for review and comment.

All additional information necessary for the review was placed in the Public Registries

COMMENTS FROM THE PUBLIC:

No comments were received from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE (TAC):

Manitoba Conservation and Water Stewardship – Parks and Natural Areas Branch (March 27, 2012)

- *No concerns*

Manitoba Infrastructure and Transportation– Highway Planning and Design Branch (March 16, 2012)

- *No concerns*

Manitoba Conservation – Wildlife & Ecosystem Protection Branch (March 12, 2012)

- *No concerns*

Manitoba Conservation - Sustainable Resource and Policy Management Branch and the Land Branch (March 29, 2012)

- *No concerns*

Manitoba Conservation and Water Stewardship – Pollution Prevention Branch- Air Quality Section (March 30, 2012)

- *No concerns*

Manitoba Health – Regional Health Authority – Central MB Inc (March 12, 2012)

- In general, Manitoba Health is in agreement/supportive for the proper management of sewage treatment to minimize risk to public health and damage to the environment.
- We have no major concerns for the development of and licensing of these lagoons.

Manitoba Conservation and Water Stewardship – Environmental Compliance and Enforcement – Central Region (March 8, 2012)

- *The proposal suggests discharge criteria of BOD₅<30 mg/L, TSS <30mg/L and NH₃<15/mg/L. We suggest that the discharge criteria for the licence should reflect the National Performance Standards in the CCME Strategy for Wastewater Effluent (2009), e.g. CBOD₅ <25 mg/L, TSS <25 mg/L, total residual chlorine <0.02 mg/L & un-ionized ammonia <1.25 mg/L.*
- *Horizon Colony also owns barns and earthen manure storages on SE and SW 36-03-02 W, one of which is permitted, the other is unpermitted.*

Disposition:

- The draft licence requires the Licencee to meet BOD₅ and TSS limit 25 mg/L.
- The draft licence requires the Licencee to meet residual chlorine limit 0.02 mg/L.
- The unionized ammonia present in the effluent will be minimized by requiring storage of wastewater until June 15 of any year prior to discharge.

Manitoba Conservation and Water Stewardship – Planning and Coordination Branch (April 2, 2012)

- *The Water Stewardship Division submits the following requirements:*
 - *The Licencee is required by the Manitoba Water Quality Standards, Objectives and Guidelines Regulation under The Water Protection Act to achieve the following effluent standards:*
 - *5-Day Biochemical Oxygen Demand ≤ 25 mg/L*
 - *Total Suspended Solids ≤ 25 mg/L*
 - *Fecal Coliforms ≤ 200 MPN / 100mL*
 - *Total Phosphorus ≤ 1 mg/L*
 - *The Licencee is required to implement trickle discharge of 0.006 m³/sec over a 15 day period during non-flood conditions.*
 - *The Licencee shall maintain and establish an undisturbed native vegetation area, with a 30-metre width, from the ordinary high water mark, of any waterbody or wetland.*
 - *The Licencee is required to develop and implement an Emergency Response Plan, including the following:*
 - *Upon a spill of untreated or partially treated wastewater into Boundary Creek, immediately inform the Pembina Valley Water Cooperative.*
 - *Note: The discharge route of the treated effluent from the proposed lagoon will be to Boundary Creek, then the Plum River, then the Red River. The Morris Regional Water Treatment Plant, of the Pembina Valley Water Cooperative, withdraws raw water from the Red River, at approximately 3 miles north of the point where the Plum River empties in to the Red River.*
- *The Water Stewardship Division submits the following concern:*
 - *The Manitoba Water Quality Standards, Objectives and Guidelines Regulation under The Water Protection Act requires new or expanding wastewater treatment facilities to meet a 1 mg/L phosphorus limit or implement a nutrient reduction strategy. If trickle discharge is proposed as a nutrient reduction strategy, the proponent must demonstrate how this strategy will reduce phosphorus loads equivalent to implementing a 1 mg/L phosphorus limit. The proposal indicates SAR levels between 4 and 6 that could allow for reuse of the valuable nutrients in wastewater through irrigation. The proponent should provide additional information*

on the feasibility of using effluent irrigation rather than direct discharge to surface water.

- *According to the Manitoba Fisheries Inventory and Habitat Classification System, forage species have been found in Boundary Creek. Ephemeral creeks, while not providing year round habitat for fish, do offer spawning, nursery and forage habitats seasonally. They also contribute to the downstream receiving waters in terms of energy and water quality. It is now well understood that degradation of upstream headwaters contributes significantly to the degradation of downstream surface waters.*
- *The Water Stewardship Division submits the following comments:*
 - *The Water Stewardship Division does not object to the approval of this proposal, at this time.*
 - *The proponent needs to be informed of the following for information purposes:*
 - *Erosion and sediment control measures should be implemented until all of the sites have stabilized.*
 - *The Water Rights Act requires a person to obtain a valid licence to control water or construct, establish or maintain any “water control works.” “Water control works” are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, a person is required to submit an application for a Water Rights Licence to Construct Water Control Works. A person may contact the following Water Resource Officer to obtain an application and/or obtain information.*
 - *A contact person is Mr. Geoff Reimer C.E.T., Senior Water Resource Officer, Water Control Works and Drainage Licensing, Manitoba Conservation and Water Stewardship, Box 4558, Stonewall, Manitoba R0C 2Z0, telephone: (204) 467-4450, email: geoff.reimer@gov.mb.ca.*

Proponent Response (May 7, 2012)

- The proponent is in agreement with abiding with all of the recommendations regarding effluent quality and the required standards for effluent discharge. As indicated in the proposal the proposed discharge rate will be restricted to 0.006 m³/sec and only occur during non-flood conditions. A 30m vegetative area will be maintained between the proposed facility and the ordinary high water mark of any waterbody or wetland.
- As the proponent lives in close proximity to the proposed facility, regular inspection is intended to be performed in order to ensure correct operation. In the event that an emergency situation such a spill or accidental discharge occurs, it is proposed to immediately notify any downstream users of the incident, in particular the Pembina Valley Water Cooperative which withdraws raw water from the Red River 3 miles north of where the plum River empties into the Red River. As the proponent utilized this same municipal water source it is in their best interest to protect it as well. As a precautionary measure, it is proposed that a culvert gate will be installed on the culvert through which the discharge effluent will enter into the Boundary Creek. This gate will remain closed unless supervised in order to minimize the potential impacts of any accidental spills. In the event of an accidental spill, the proponent has sufficient resources and equipment to rectify the situation and facilitate a cleanup of the affected area in a relatively short period of time.
- Irrigation of effluent is strongly encouraged only on actively growing crops and timing of this application would need to coincide with an already busy farming schedule which consumes most, if not all of the available equipment and manpower available within the colony. The absence of actively growing crops during October, which would correspond to the second discharge period, would leave the applied product susceptible to runoff during the subsequent spring thaw and late fall rains. Based on the weather experienced the last several years, the wastewater applied during the fall discharge could potentially be applied to already saturated soil conditions or not be able to be applied due to lack of accessibility to the application fields as a result of waterlogged soils. A request for surface discharge would then ensue in order to continue operating. By utilizing trickle discharge and maintaining natural vegetation in the discharge drain, the intent is to maximize the retention and absorption time in order to recapture as many of the nutrients with the discharge stream. By harvesting the vegetation on an annual basis the nutrients will be recycled as animal feed and redistributed to cropland as manure fertilizer. As witnessed in the Boundary Creek, there is also significant natural vegetation along this waterway which would further enhance the nutrient uptake before the effluent reached the Red River.
- Discharge of effluent would only occur during the period between June 15th and October 31st of any year. This period is commonly accepted as the period after which fish spawning has occurred and is therefore not considered to have a significant impact on reproduction. Strict adherence to Water Quality Standards will also ensure minimal impact on the waterway.

- It is the intent of the proponent to implement erosion and sediment control measures during and following the construction until such time that permanent vegetative cover can be established. A Water Rights Licence to Construct Water Control Works will be obtained prior to undertaking any drain construction associated with the proposal.

Disposition:

- After receiving the additional information from the proponent, no further comments were received from Planning and Coordination Branch.

COMMENTS FROM FEDERAL REPRESENTATION:

Canadian Environmental Assessment Agency (CEEA) (April 17, 2012)

- *Project information was shared with the Department of Fisheries and Oceans Canada (DFO), Health Canada (HC), Environment Canada (EC), Western Economic Diversification and Infrastructure Canada as part of the federal coordination process. Based on the responses to the survey the application of the Canadian Environmental Assessment Act (the Act) by a federal authority will not be required for this project.*
- *HC has indicated it can contribute expert advice related to human health, to an RA if a written request is submitted to HC.*
- *EC has reviewed the project information and determined it is not an RA for the project. EC has provided a letter of comments for the proponent related to the following areas:*
 - 1) Project Specific Comments*
 - 2) Federal Requirements*
 - 3) Best Practices*
 - 4) Migratory Birds*
 - 5) Species at Risk*
- *EC has also provided the following documents for the proponent to review:*
 - 1) Dangerous Goods Handling & Transportation*
 - 2) EA Best Practices (2004)*
 - 3) EC SAR Guidelines (November 2011)*
 - 4) Plant Setback Guidelines (revised November 2010)*

Environment Canada - Environmental Protection Division, Prairie & Northern Region (March 28, 2012)

(1) Project Specific Comments

- ***EC recommends that lagoon effluent quality meets the appropriate standards set out in the CCME Environmental Quality Guidelines prior to release to the environment. The guidelines are available at: www.ccme.ca. EC recommends that the proponent verify that slaughterhouse wastewater will be compatible with lagoon processes (i.e. will not hinder the lagoon's microbial activity).***
- ***Section 4.4, General Design Parameters, page 12 of the Proposal states that “[c]onstruction of the bottom of the storage will consist of removing the clay material to 1.0 m below the design elevation of the facility and replacing and compacting this high plastic clay material in 0.15m lifts to achieve a reconstructed clay liner”. Following the construction of the lagoon liner, EC recommends that a liner leak test be conducted to confirm that there are no leaks. EC recommends that minimum liquid levels be maintained in all cells to ensure cracking of the liner does not occur. If for some unforeseen circumstance a cell is allowed to remain empty, EC recommends that leak testing on the liner be performed (again) prior to filling with liquid. EC recommends that liquid levels be monitored to ensure proper levels are maintained.***
- ***EC recommends extra precaution around sewage pumping / lift stations in order to assist in avoiding potential Fisheries Act violations. EC recommends the proponent develop strategy to diminish or eliminate the risk of discharging untreated or partially treated wastewater from pumping stations that includes:***
 - *a program to reduce extraneous flows in the sewage collection system;*
 - *a replication of pumping capacity at the pumping station to at least equal the design flow (this may involve redundancy in both pumps and power supply);*
 - *an alarm system to provide for timely notification of the system operator and prompt implementation of a predefined contingency plan for emergency operations (for smaller operations, it is often expedient to direct the alarm signal outside normal working hours to other manned emergency providers, such as fire halls);*
 - *a fixed or mobile standby system consisting of either alternate power supply or pumping capabilities or both; and*
 - *an in-line storage capacity adequate to provide full retention of the wastewater until remedial action is fully implemented.*
- ***Section 7.5, Gasoline & Associated Products, page 19 of the Proposal outlines that “[r]efueling and storage of petroleum products will be done within the developed yard site”. EC reminds the proponent to ensure all requirements under Manitoba's Storage and Handling of Petroleum Products and Allied Products Regulation are met (see attached).***

(2) Federal Requirements

- *EC advises the proponent that the following existing **and proposed** Federal requirements pertain to managing wastewater effluent.*

i. General Prohibition under the Fisheries Act:

Subsection 36(3) of the Fisheries Act prohibits any person from depositing or permitting the deposit of a deleterious substance of any type in water frequented by fish. Subsection 36(3) also prohibits deposit of such a substance in any place under any conditions where the deleterious substance, or any other deleterious substance that results from the deposit, may enter any such water. The deposit of a deleterious substance to water frequented by fish constitutes a violation of the Fisheries Act, whether or not the receiving water itself is made deleterious by the deposit, except where federal regulations under subsection 36(5) of the Act, or other Governor in Council regulations, permit the discharge of the deleterious substance to levels set out in the regulations.

ii. Deposits Out of the Normal Course of Events:

*Subsection 38(4) of the Fisheries Act refers to deposits out of the normal course of events. This could include overflows, spills, leaks, by-passes and regulatory exceedances or other deposits in contravention of subsection 36(3) of the Fisheries Act. Paragraphs 38(4)(a) and (4)(b) of the Fisheries Act require any person who owns, has the charge of, manages or controls the deleterious substance or causes or contributes to causing the deposit or a serious and imminent danger of such a deposit to report such occurrence to a fishery inspector or the person or authority prescribed by the regulations. Subsection 38(5) of the Act requires any person referred to in paragraphs 38(4)(a) or (b) to take all reasonable measures to prevent a deposit referred to in subsection 38(4) or a serious and imminent danger of such a deposit, or to counteract, mitigate or remedy any adverse effects that result or may reasonably be expected to result from the abnormal deposit. **EC recommends that the proponent develop plans to prevent, prepare for, and respond to overflows, spills, leaks, by-passes and regulatory exceedances or other deposits in contravention of subsection 36(3) of the Fisheries Act.***

iii. Deposit Out of the Normal Course of Events Notification Regulations:

*The **Deposit Out of the Normal Course of Events Notification Regulations** under the Fisheries Act prescribe the persons, in the relevant province or territory, for receiving notification of the deposit of a deleterious substance out of the normal course of events as required under subsection 38(4) of the Fisheries Act. The following website provides additional information: www.gazette.gc.ca/rp-pr/p1/2009/2009-12-19/html/reg5-eng.html*

*In Manitoba, report all deposits out of the normal course of events, or the serious and imminent danger of such a deposit, to the Manitoba Department of Conservation 24-hour environmental emergencies reporting line at **204-944-4888**.*

iv. Proposed Wastewater Systems Effluent Regulations:

On March 20, 2010, the Government of Canada published, in the Canada Gazette, Part I, proposed Wastewater Systems Effluent Regulations under the Fisheries Act. The proposed Regulations and Regulatory Impact Analysis Statement (RIAS) can be viewed at: <http://www.gazette.gc.ca/rp-pr/p1/2010/2010-03-20/html/reg1-eng.html>. An overview of the proposed regulatory requirements can be found in the RIAS. Until the proposed Regulations are finalized, it may be prudent to take into consideration the proposed Regulations in the design and operation of wastewater systems. It is important to note that the Regulations are subject to change until their final publication in the Canada Gazette, Part II.

The proposed Regulations establish national effluent quality standards for effluent deposited from wastewater systems. More specifically, the proposed Regulations prescribe biochemical oxygen demanding (BOD) matter, suspended solids, total residual chlorine and un-ionized ammonia as deleterious and set out conditions under which the deposit of effluent containing these substances would be authorized, including the requirement to deposit a non-acutely lethal effluent, effluent monitoring, and reporting. The effluent standards for BOD matter and suspended solids represent a requirement for secondary wastewater treatment or equivalent.

There are also several existing risk management instruments and regulatory requirements applicable to wastewater systems in Canada. Persons responsible for wastewater systems (including combined sewers) in Canada must comply with all applicable federal legislation including the Fisheries Act and the Canadian Environmental Protection Act, 1999 (CEPA 1999) as well as any other legislation applicable depending on the geographical location of the system.

(3) Best Practices

EC encourages the proponent to implement best practices for managing wastewater effluent. This includes, but is not limited to, the following:

i. Pollution Prevention:

CEPA 1999 defines pollution prevention as “the use of processes, practices, materials, products, substances or energy that avoid or minimize the creation of pollutants and waste and reduce the overall risk to the environment or human health”. In the case of wastewater treatment, pollution prevention refers to actions taken to reduce or eliminate pollutants prior to their entry into the wastewater collection systems.

EC refers the proponent to the document Wastewater Source Control — A Best Practice by the National Guide to Sustainable Municipal Infrastructure (March 2003) for more information on wastewater source control. This document identifies a sewer use by-law as a basic element of a source control program. To obtain a copy of this

document refer to the InfraGuide Best Practice Reports for Stormwater and Wastewater at the following website:

<http://www.sustainablecommunities.fcm.ca/Infraguide/>

EC recommends the proponent develop a comprehensive Operation & Maintenance (O&M) program and Asset Management System to ensure that systems are maintained and upgraded/replaced as required to reduce risk to the environment.

EC recommends that owners/operators of wastewater systems consider having a documented Environmental Management System (consistent with ISO 14001) that states the commitment by the owners to meet all legal requirements to prevent the release of deleterious and toxic substances, to review and adjust the wastewater treatment for continuous improvement using best possible technologies (BPT) for wastewater treatment, and to adopt best management practices (BMP).

ii. Monitoring, Operation and Maintenance:

EC recommends that the proponent ensure the following procedures are in effect:

- *Operator training and certification as per provincial licence requirements related to aspects such as: routine process operation, optimization and emergency response;*
- *Routine maintenance planning and scheduling procedures that include preventative and predictive planning aspects; and*
- *Monitoring of all wastewater system releases to the receiving environment including air, sludge/solids and effluent in accordance with provincial and federal legislation.*

(4) Migratory Birds

EC's mandate includes the protection of migratory birds and their habitat. Regulations pursuant to the Migratory Birds Convention Act (MBCA) provide for the conservation of migratory birds and the protection of their nests and eggs. Section 6 of the regulations prohibits the disturbance, destruction, or taking of a nest, egg or nest shelter of a migratory bird. Possession of a migratory bird, nest or egg without lawful excuse is also prohibited. Section 5.1 of the MBCA prohibits the deposition of substances harmful to migratory birds in waters or areas frequented by migratory birds, or in a place from which the substance may enter such waters or such an area.

Section 9.0, Construction Schedule, page 9.0 of the Proposal states that "...[c]onstruction would occur between May 1st and October 31st". EC recommends that habitat destruction activities (e.g. vegetation clearing of any sort, construction, mowing, trenching, etc.) should avoid at a minimum the period between April 15 and July 31. If activities must take place within this timeframe, EC recommends the proponent ensure that a person with qualified bird expertise confirm that there are no

active nests in the area prior to activities commencing. If an individual has a priori knowledge of an active nest, at any time during the year, it must be protected with a suitable species appropriate buffer until the young have fledged.

EC provides timing restrictions as general guidelines for industry to protect the great majority of migratory birds while realizing the practicalities of development activities on the landscape. However the onus remains with the proponent to comply with the legislation.

EC recommends that food, domestic wastes, and petroleum-based chemicals (e.g., greases, gasoline, glycol-based antifreeze) be made inaccessible to wildlife at all times. Such items can attract predators of migratory birds such as foxes, ravens, gulls, and bears. Although these animals may initially be attracted to the novel food sources, they often will also eat eggs and young birds in the area. These predators can have significant negative effects on local bird populations.

(5) Species at Risk

The federal Species at Risk Act (SARA) is directed towards preventing wildlife species from becoming extinct or lost from the wild, helping in the recovery of species that are at risk as a result of human activities, and promoting stewardship. The SARA prohibits the killing, harming or harassing of listed species; the damage and destruction of their residences; and the destruction of critical habitat.

Section 7.4, Impacts on Wildlife, Forestry and Heritage Resources, page 18 of the Proposal states “[t]he Manitoba Conservation Wildlife and Ecosystem Branch Data Center database has confirmed that the Burrowing Owl is found in this region”, and the proponent indicates that as no clearing or disruption of native undisturbed habitats is to be undertaken, no impact to owl population or habitat is expected. EC reminds the proponent that Burrowing Owls may also nest in tame pasture, or near native grasslands. EC recommends that call-playback surveys (under permit from provincial wildlife authorities) be conducted in any such areas (or other suitable nesting areas) within 500m of the edge of the proposed development prior to project commencement to determine if Burrowing Owl are present in the project area. EC recommends a year-round 500 m setback from any Burrowing Owl nesting burrows currently active, or active in the past 24 months. EC also recommends a year-round 300m setback from roosting burrows.

EC also reminds the proponent that the Manitoba Conservation Data Centre provides information on where rare species have been observed and reported; a lack of records for a project area does not indicate that rare species do not occur on the proposed site. Appropriately timed surveys of the proposed project area (including ancillary features) using recognized survey protocols would assist the proponent in determining if Species at Risk exist within or near the project footprint.

In the event that species at risk are encountered, EC refers the proponent to the Petroleum Industry Activity Guidelines for Wildlife Species at Risk in the Prairie and Northern Region (see attached) and the Activity Setback Distance Guidelines for Prairie Plant Species at Risk (see attached) for a list of species appropriate setbacks.

Please note the following amendments not reflected in the attached Petroleum Industry Activity Guidelines for Wildlife Species at Risk in the Prairie and Northern Region document:

Canada Warbler: 300m (high disturbance); 150m (medium); 0-50m (low) minimum May 1 to July 31

Olive-sided Flycatcher: 300m (high disturbance); 150m (medium); 0-50m (low) minimum May 1 to August 31

Rusty Blackbird: 300m (high disturbance); 150m (medium); 0-50m (low) minimum May 1 to July 31

Common Nighthawk: 200m (high disturbance); 100m (medium); 0-50m (low) minimum May 1 to August 31

EC requests clarification of any deterrents that will be put in place to protect migratory birds and species at risk from entering the Lagoon or any other project areas that may be hazardous to these species.

In the event that species at risk are encountered, EC reminds potential responsible authorities of their responsibilities under subsections 79(1) and 79(2) of the SARA.

“Every person who is required by or under an Act of Parliament to ensure that an assessment of the environmental effects of a project is conducted must, without delay, notify the competent minister or ministers in writing of the project if it is likely to affect a listed wildlife species or its critical habitat.”

“The person must identify the adverse effects of the project on the listed wildlife species and its critical habitat and, if the project is carried out, must ensure that measures are taken to avoid or lessen those effects and to monitor them. The measures must be taken in a way that is consistent with any applicable recovery strategy and actions plans.”

To assist proponents in accounting and managing Species at Risk, Environment Canada has developed a guide titled, "Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada" (see attached).

Proponent Response (May 7, 2012)

- 1) It is intended that the discharge effluent will meet the appropriate standards set out in the CCME Environmental Quality Guidelines prior to discharge.

Traditionally no significant amounts of industrial cleaners and disinfectants are used within the colony slaughterhouse. As a result, it is not anticipated that the activities within the slaughter house will have an impact on microbial activity in the lagoon.

In order to confirm the functionality of the proposed reconstructed clay liner, it is intended to verify the clay liner thickness in numerous locations through the structure and perform random hydraulic conductivity test as indicated by Manitoba Conservation staff. Appropriate measures will be taken to ensure the clay liner remains hydrated in order to prevent deterioration.

Measures will be implemented as per the recommendations provided with respect to minimizing the potential risk of discharging untreated or partially treated wastewater from the pump station. The proponent, Horizon Colony will reside in close proximity to the facility and will regularly inspect and maintain the appurtenances. A standby generator will facilitate emergency power to ensure continual operation, and an alarm system will be utilized to advise the operator of a malfunction.

- 2) ii) The proponent is in agreement with abiding with all of the recommendations regarding effluent quality and the required standards for effluent discharge. As indicated in the proposal the proposed discharge rate will be restricted to $0.006 \text{ m}^3/\text{sec}$ and only occur during non-flood conditions. A 30m vegetative area will be maintained between the proposed facility and the ordinary high water mark of any waterbody or wetland.

As the proponent lives in close proximity to the proposed facility, regular inspection is intended to be performed in order to ensure correct operation. In the event that an emergency situation such a spill or accidental discharge occurs, it is proposed to immediately notify any downstream users of the incident, in particular the Pembina Valley Water Cooperative which withdraws raw water from the Red River 3 miles north of where the plum River empties into the Red River. As the proponent utilized this same municipal water source it is in their best interest to protect it as well. As a precautionary measure, it is proposed that a culvert gate will be installed on the culvert through which the discharge effluent will enter into the Boundary Creek. This gate will remain closed unless supervised in order to minimize the potential impacts of any accidental spills. In the event of an accidental spill, the proponent has sufficient resources and equipment to rectify the situation and facilitate a cleanup of the affected area in a relatively short period of time.

- 3) ii) EC's recommendations will implemented as prescribed by Manitoba law and the conditions of the Operating Licence. Routine maintenance and scheduling of service is conducted by members of the colony and is typically the responsibility of the system operator.
- 4) As the proposed construction site currently consists of cultivated farm land, and is well removed from any water source considered usable by most migratory birds, it is unlikely that any habitat will be disrupted.

Food, domestic waste and petroleum products are typically made unavailable and stored in appropriate containers to prevent scavenging and accidental access. This practice intends to be continued and will subsequently address the concerns expressed.

- 5) Within the scope of the proposal and the area identified for construction of the facility, there will be no need to disturb any habitat considered to be suitable for the Burrowing Owl such as tame pasture or native grassland. The proposed construction site consists entirely of cultivated farmland which would otherwise be cultivated and disrupted through typical farming activities.

It is proposed to construct a fence around the perimeter of the facility that will act as a visual deterrent for many migratory birds. Elimination of any vegetation within the lagoon area, such as cattails, will decrease the likelihood of birds considering the facility to be a hospitable environment. Maintaining the vegetation/grass cover to a reasonably low height on the berms will further detract from providing a suitable resting area. In the event that these measures are not capable of controlling migratory birds, motion devices considered to be effective avian deterrents will be incorporated as a means of discouraging birds from entering the lagoon area.

EC Response (May 16, 2012)

- *EC has reviewed the letter from Manitoba Conservation on the Horizon Hutterite Holding Co. Ltd. - Domestic Wastewater Treatment Lagoon and has no further comments at this time.*

Disposition

- After receiving the additional information from the proponent, no further comments were received from Environment Canada.

PUBLIC HEARING:

- A public hearing is not recommended because no comments were received from the public.

CROWN-ABORIGINAL CONSULTATION:

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

There is no aboriginal community nearby the lagoon and would be no infringement of aboriginal or treaty rights under Section 35 of the Constitution Act, 1982. Therefore, it is concluded that Crown-Aboriginal consultation is not required for the project.

RECOMMENDATION:

The Proponent should be issued a Licence for the construction and operation of the wastewater treatment lagoon in accordance with the specifications, limits, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Environmental Approvals Branch until the liner testing has been completed and the Development is commissioned.

PREPARED BY:

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Environmental Approvals Branch
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June 7, 2012

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