

Environment Act Licence

Manitoba
Environment



Licence No. 1789

Issue Date APRIL 15, 1994

In Accordance with the Manitoba Environment Act (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED TO:

PELICAN HARBOUR RESORTS LTD.: "the Licencee"

for the operation of the Development being a wastewater collection system and a sewage treatment plant located on the northwest quarter of Section 36, Township 25, Range 8 EPM and with discharge of treated effluent to Lake Winnipeg and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"**appurtenances**" means machinery, appliances, or auxiliary structures attached to a main structure to enable it to function, but not considered an integral part of it;

"**Director**" means an employee so designated pursuant to the Environment Act;

"**DPD**" means an analytical method for determining chlorine residual utilizing the reagent DPD (n-diethyl-p-phenylenediamine);

"**effluent**" means treated wastewater flowing or pumped out of the wastewater treatment facility;

"**fecal coliform**" means aerobic and facultative, Gram-negative, nonspore-forming, rod-shaped bacteria capable of growth at 44.5 °C, and associated with fecal matter of warm-blooded animals;

"**five-day biochemical oxygen demand**" means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within 5 days at a temperature of 20°C;

"**influent**" means water, wastewater, or other liquid flowing into a wastewater treatment facility

"**MPN Index**" means the most probable number of coliform organisms in a given volume of wastewater which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

“septage” means the sludge produced in individual on-site wastewater disposal systems such as septic tanks;

“sludge” means accumulated solid material containing large amounts of entrained water, which has separated from wastewater during processing;

“sludge solids” means solids in sludge;

“total coliform” means a group of aerobic and facultative anaerobic, Gram-negative, nonspore-forming, rod-shaped bacteria, that ferment lactose with gas and acid formation within 48 hours at 35 °C, and inhabit predominantly the intestines of man or animals, but are occasionally found elsewhere and include the sub-group of fecal coliform bacteria;

“waste disposal ground” means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with Manitoba Regulation 150/91;

“wastewater” means the spent or used water of a community or industry which contains dissolved and suspended matter;

“sewage” means household and commercial wastewater that contains human waste;

GENERAL REQUIREMENTS

1. The Licencee shall direct all sewage generated within the recreational subdivision toward the sewage treatment plant or other approved sewage treatment facilities.
2. The Licencee shall limit the sewage load on the sewage treatment plant to the design capacities as follows:
 - (a) hydraulic loading not to exceed 11.4 cubic metres over any 24 hour period or 5.7 cubic metres over any 4 hour period;
 - (b) influent biochemical oxygen demand (BOD₅) concentration not to exceed 400 milligrams per litre;
 - (c) influent total suspended solids concentration not to exceed 400 milligrams per litre; and
 - (d) influent ammonia (NH₃) concentration not to exceed 35 milligrams per litre.
3. The Licencee shall, in case of physical or mechanical breakdown of the wastewater collection and/or the sewage treatment plant:
 - (a) notify the Director immediately;
 - (b) identify the repairs required to the wastewater collection and/or the sewage treatment plant; and
 - (c) complete the repairs in accordance with any written instructions of the Director.

4. The Licencee shall install, operate and maintain an effluent discharge pipeline from the sewage treatment plant into Lake Winnipeg so that all the effluent is discharged a minimum of 10 metres from the nearest shoreline.
5. The Licencee shall ensure that the sewage treatment plant is not located within a distance of 100 metres from the nearest residence.
6. The Licencee shall ensure that sewage and/or sewage sludge are not spilled in the area around the sewage treatment plant.
7. The Licencee shall construct an all-weather access road and dumping facility for truck hauled sewage. The dump station shall be equipped with an influent pipe fitted with a quick-coupler. All trucks used to deliver sewage to the treatment plant are to be equipped with a flexible hose and matching adapters for the quick-coupler. All sewage delivered to the treatment plant is to be discharged through the hose and influent pipe into the trash tank below the liquid surface.
8. The Licencee shall install, operate and maintain a low liquid level alarm system in the chlorine solution feed tank. The low liquid alarm sensor shall be connected to an external visual alarm and an external audible alarm acceptable to the Director.

DISCHARGE LIMITS, TERMS AND CONDITIONS

9. The Licencee shall not discharge effluent from the sewage treatment plant, as sampled in the chlorine contact chamber near the point of discharge from the chamber, where:
 - (a) the organic content of the sewage effluent, as indicated by the five day biochemical oxygen demand, is in excess of 30 milligrams per litre;
 - (b) the non-filterable residue content of the sewage effluent is in excess of 30 milligrams per litre;
 - (c) the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample; or
 - (d) the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample.
10. The Licencee shall ensure that biosolids and sludge solids are disposed of at an approved treatment facility operated by the City of Winnipeg.

MONITORING AND REPORTING SPECIFICATIONS

11. The Licencee shall provide a means of accessing the programmable logic controller from the sewage treatment plant to obtain the process time information and elapsed process time information.
12. The Licencee shall provide a heated and secured effluent monitoring station acceptable to the Director and equipped with:
 - (a) a direct access way for an effluent sampling line to a location near the discharge from the chlorine contact chamber;
 - (b) an electrical power source of 15 amperes at 110 volts; and
 - (c) a connection cable and plug to link an ISCO portable automated sampler with an isolated contact closure type output of at least 25 millisecond duration from the programmable logic controller which signals the effluent discharge cycle.
13. The Licencee shall monitor the chlorination process of the sewage treatment plant on a daily basis using the DPD method from the latest edition of Standard Methods for the Examination of Water and Wastewater or using other methods approved by the Director and shall submit the results to the Director on a monthly basis, on a form approved by the Director.
14. The Licencee shall provide to the Director, on or before July 1, 1995, an "as-constructed" plot plan of the sewage treatment facility and the effluent discharge pipeline complete with final elevations.

REVOCATION

If in the opinion of the Director the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out herein, the Director may revoke, temporarily or permanently, this Licence.



Larry Strachan, P. Eng.
Director
Environment Act

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