Environment Act Licence Manitoba Environment



Licence No. _______ Issue Date _____OCTOBER 2, 1990

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125) THIS LICENCE IS ISSUED TO:

70295 MANITOBA LTD.: APPLICANT WASTEWATER TREATMENT LAGOON - OAKRIDGE COLONY (KAMSLEY FARM SITE)

The following limits, terms and conditions shall be complied with in connection with the construction and operation of a wastewater collection system and wastewater treatment lagoon located in the northeast quarter of Section 19, Township 6, Range 9 West and with discharge of treated effluent by irrigation onto agricultural land:

- I. The Applicant shall ensure that all domestic sewage generated within the farm site is directed toward the wastewater treatment lagoon.
- 2. The Applicant shall ensure that no livestock wastes is directed toward the wastewater treatment lagoon.
- 3. The Applicant shall not discharge effluent from the wastewater treatment lagoon:
 - (a) where the organic content of the effluent, as indicated by the five day biochemical oxygen demand, is in excess of 30 milligrams per litre;
 - (b) where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;

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- (c) where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample; or
- (d) between the first day of October of any year and the 15th day of May of the following year, unless prior approval, by the Director, is given.
- 4. The Applicant shall operate and maintain the wastewater treatment lagoon in such a manner that:
 - (a) the release of offensive odours is minimized;
 - (b) the organic loading on the primary cell of the lagoon system, as indicated by the five day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day; and
 - (c) the depth of sewage in the primary cell does not exceed 1.5 metres.
- 5. The Applicant shall discharge effluent from the wastewater treatment lagoon only on to land owned by the Applicant.
- 6. The Applicant shall not discharge effluent:
 - (a) within 300 metres of any dwelling not owned or lawfully controlled by the Applicant;
 - (b) within 100 metres of any surface watercourse, groundwater well, or unprotected aquifer ;or
 - (c) within 100 metres of any property boundary.

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- 7. The Applicant shall ensure that all treated effluent is disposed of by spray irrigation onto land owned by the Applicant and that:
 - (a) effluent is only discharged to irrigate:
 - (i) actively growing cereal, forage or oil seed crops;
 - (ii) grasslands which will not be utilized for grazing:
 - A. by dairy cattle for at least 30 days after effluent is applied;
 - B. by livestock other than dairy cattle for at least 7 days after effluent is applied;
 - (iii) agriculture crops where irrigation does not take place during or for at least 7 days prior to harvesting of the crops;
 - (b) when corn is grown it is used solely for making sileage;
 - (c) during 10 continuous hours in every 24-hour period, no application of effluent takes place ;
 - (d) if ponding or surface runoff occurs during irrigation the gross depth of effluent applied during any application of effluent shall be reduced.
- 8. The Applicant shall, prior to the construction of the dikes for the wastewater treatment lagoon:
 - (a) remove all organic topsoil from the area where the dikes will be constructed; or,

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- (b) remove all organic material for a depth of 0.3 metres and a width of 3.0 metres from the area where the dike will be built, provided all the lagoon dikes are lined with clay or other suitable material as required by Clause 9, to a minimum thickness of one metre measured perpendicular to the face of the side wall.
- 9. The Applicant shall construct the wastewater treatment lagoon system with clay or other suitable material such that all interior surfaces of the lagoon structure are underlain with a minimum of 1 metre of soil having a hydraulic conductivity of 1 x 10⁻⁷ centimetres per second or less.
- 10. The Applicant shall arrange with the designated Environment Officer a mutually acceptable time and date for any required soil sampling between the 15th day of May and the 15th day of October of any year, unless prior approval, by the Director, is given.
- 11. The Applicant shall either:
 - (a) subject undisturbed soil samples from each cell of the completed wastewater treatment lagoon to hydraulic conductivity tests, the number and location of samples to be specified by the designated Environment Officer up to a maximum of twenty samples; or
 - (b) where undisturbed soil samples cannot be taken, test the soil of 4 plane surfaces of the wastewater treatment lagoon for hydraulic conductivity by an insitu field test method as prescribed by the designated Environment Officer.
- 12. The Applicant shall, not less than 2 weeks before the wastewater treatment lagoon is placed in operation, submit to the Director the results of the tests carried out pursuant to Clause 11.

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- 13. The Applicant shall, in case of physical or mechanical breakdown of the wastewater collection and/or treatment system:
 - (a) notify the Director immediately;
 - (b) identify the repairs required to the wastewater collection and/or treatment system;
 - (c) complete the repairs in accordance with written instructions of the Director.
- 14. The Applicant shall install and maintain a fence around the wastewater treatment lagoon to limit access.

Larry Strachan, P. Eng. Director Environment Act

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