

# Environment Act Licence

Manitoba  
Environment



Licence No. 1542

Issue Date APRIL 16, 1992

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

THIS LICENCE IS ISSUED TO:

**BLUMENHOF HOLDING CO. LTD. and BLUMENHOF FARMS LTD.**

(jointly and severally referred to as the Licensee)

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 southeast quarter of Section 9, Township 4, Range 3 EPM in the Rural Municipality of De Salaberry and with discharge of treated effluent by irrigation onto agricultural land:


1. The Licensee shall ensure that all domestic sewage generated within the farm site is directed toward the wastewater treatment lagoon.
2. The Licensee shall ensure that no livestock wastes are directed toward the wastewater treatment lagoon.
3. The Licensee 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;

- (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 Licensee 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 Licensee shall discharge effluent from the wastewater treatment lagoon only onto land owned by the Licensee.
6. The Licensee shall not discharge effluent:
- (a) within 300 metres of any dwelling not owned or lawfully controlled by the Licensee;
  - (b) within 100 metres of any surface watercourse, groundwater well, or unprotected aquifer; or
  - (c) within 100 metres of any property boundary.

7. The Licensee shall ensure that all treated effluent is disposed of by spray irrigation onto land owned by the Licensee 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 silage;
  - (c) during 10 continuous hours in every 24-hour period, no application of effluent takes place ; and
  - (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 Licensee shall, prior to the construction of the clay core for the wastewater treatment lagoon dikes, remove all the topsoil and organic material from the area where the dikes will be constructed.

9. The Licensee shall construct a structurally stable and continuous clay core in all dikes, except the centre dike between the cells, having a hydraulic conductivity of  $1 \times 10^{-7}$  centimetres per second or less and with a minimum thickness of 1 metre. The clay core shall extend into the in-situ clay underlying the lagoon structure a minimum of 0.3 metres.
10. The Licensee shall construct a structurally stable centre dikes, between adjoining cells with clay or other suitable material having a hydraulic conductivity of  $1 \times 10^{-6}$  centimetres per second or less.
11. The Licensee shall ensure that the wastewater treatment lagoon system is underlain by a continuous layer of soil having a minimum thickness of 1 metre and a hydraulic conductivity of  $1 \times 10^{-7}$  centimetres per second or less and that the underlying clay layer is continuous with the the clay core in the dikes as referred to in Clause 9.
12. The Licensee 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.
13. The Licensee shall advise the designated Environment Officer, one week prior to the commencement of construction of the clay core.
14. The Licensee shall subject undisturbed soil samples, from the clay core and the underlying in-situ clay core 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.
15. The Licensee 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 14.

16. The Licensee 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) undertake all repairs to minimize unauthorized discharges of wastewater and
  - (d) complete the repairs in accordance with written instructions of the Director.
  
17. The Licensee shall install and maintain a fence around the wastewater treatment lagoon to limit access.
  
18. The Licensee shall, on or before 31st day of May, 1993, provide to the Director "as constructed" drawings of the wastewater treatment lagoon and all appurtenances.



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**Larry Strachan, P. Eng.**  
**Director**  
**Environment Act**

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