## **Environment Act Licence**

Manitoba Environment and Workplace Safety and Health



Licence No.	1199	_
Issue Date	May 26, 1988	

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

## BARICKHAN COLONY LID./SHADY LANE FARMS; APPLICANT

The following limits, terms, and conditions shall be complied with in connection with the operation of a wastewater treatment lagoon located on SE 1/4 Section 5-9-9 WPM and with discharge of reated effluent onto agricultural land located on E 1/2 Section 5-9 WPM.

- 1. The applicant shall ensure that all sewage generated within the camp site is directed toward the said wastewater treatment lagoon.
- 2. The applicant shall so discharge effluent from the said wastewater treatment lagoon:
  - (a) where the organic content of the effluent, as indicated by the five any 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;
  - where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample;
  - (d) between the first day of November of any year and the 15th day of May of the following year, unless prior approval by the Director is given.
- 3. The applicant shall not discharge effluent from the primary cell of the wastewater treatment lagoon, except to the secondary cell of the said lagoon.

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- 4. The applicant shall operate and maintain the said 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 sewage lagoon system, as indicated by the five day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day.
  - (c) the depth of sewage in the primary cell does not exceed 1.5 metres.
- 5. The applicant shall discharge extremely from the said wastewater treatment lagoon only outo lands owned or lawfully controlled by the applicant.
- 6. The applicant shall not discharge effluent within 300 metres of any dwelling not owned a langualty controlled by the applicant.
- 7. The applicant shall not dis large effluent within 60 metres of any property boultar, turface watercourse or groundwater well.
- 8. The applicant shall carry out the irrigation with effluent in such a manner that:
  - (a) effect is only discharged to irrigate
    - (i) stubble fields, or worked stubble fields in the fall after the growing season has ended; or,
    - ii) cultivated summerfallow fields; or,
    - (iii) grasslands which will not be utilized for hay, grazing or similar use during or for at least:
      - A. 30 days prior to grazing by dairy cattle;
      - B. 7 days prior to grazing by livestock other than dairy cattle; or,
    - (iv) agricultural crops where:
      - A. irrigation does not take place during or for at least 7 days prior to harvesting of the crops;

- B. forage crops, cereals grain or oil seed crops are grown on effluent irrigated lands provided that where corn is grown it is used solely for silage.
- (b) if surface ponding or surface runoff occurs during irrigation the gross depth of effluent applied during any application of effluent shall be reduced;
- (c) no application of effluent takes place during not less than 10 continuous hours in every 24-hour period.
- 9. The applicant shall, in case of physical or mechanical breakdown of the wastewater collection and/or treatment system:
  - (a) notify the Director immediatel
  - (b) identify the require required to the wastewater collection and/or tractment system;
  - (c) complete the tepairs in accordance with the written instructions of the Director.
- 10. The applicant shall prior to the construction of dykes for the said asterate treatment lagoon:
  - (a) remove all organic topsoil from the area where the dakes all be constructed; or,
  - remove all organic material for a depth of 0.3 metres and a width of 3.0 metres from the area where the dyke will be built, providing all the lagoon dykes are lined with clay or other suitable material as required by Clause 11, to a minimum thickness of one metre measured perpendicular to the face of the side wall.
- 11. The applicant shall construct the said wastewater treatment lagoon with clay or other suitable material such that all interior surfaces of the said lagoon structure are underlain with a minimum of 1 metre of soil having a hydraulic conductivity of  $1 \times 10^{-7}$  centimetres per second or less.

- 12. The applicant shall either:
  - (a) subject undisturbed soil samples from the completed lagoon to hydraulic conductivity tests, the number and location of said samples to be specified by an 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 said lagoon for hydraulic conductivity by an insitu field test method as prescribed by an Environment Officer.
- 13. The applicant shall, not less than 2 yeeks before the said wastewater treatment lagoon is placed in operation, submit to the Director the results of the lests carried out pursuant to Clause 12.

C.B. Orcutt

Director

Environmental Control Services

FILE NO: 2731.10