Manitoba Environment and Workplace Safety and Health



Licence No				
Issue Date	June	28,	1988	

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

THIS LICENCE IS ISSUED TO:

**Environment Act** 

Licence

## BROAD VALLEY COLONY FARMS; APPLICANT

The following limits, terms and conditions shall be complied with in connection with the operation of a wastewater treatment lagoon located on the SW 1/4 of section 2, township 23, range 1 W.P.M. in the L.G.D. of Fisher servicing the Broad Valley Colony Farms and with the discharge of treated effluent onto agricultural lands:

- 1. The applicant shall ensure that all sewage generated within the Broad Valley Colony farm site is directed toward the wastewater treatment lagoon.
- 2. The applicant shall not discharge effluent from the wastewater treatment lagoon system where:
  - a) the organic content of the sewage effluent, as indicated by the five day biochemical oxygen demand, is in excess of 30 miligrams per litre;
  - b) the faecal coliform content of the sewage effluent, as indicated by the MPN Index, is in excess of 200 per 100 millilitres of sample;
  - c) the total coliform content of the sewage effluent, as indicated by the MPN Index, is in excess of 1,500 per 100 millilitres of sample.
- 3. The applicant shall not discharge sewage effluent from the wastewater treatment lagoon system between November 1st of any year and May 15th of the following year without receiving prior approval from the Director.
- 4. The applicant shall maintain and operate the wastewater treatment lagoon system in such a manner that:
  - a) the release of offensive odours is minimized;
  - b) the organic loading on the primary cell, as indicated by the five day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day.
- 5. The applicant shall not discharge effluent from the primary cell of the wastewater treatment lagoon system except to the secondary cell of the said lagoon.
- 6. The applicant shall ensure that effluent from the wastewater treatment lagoon system is discharged, only onto lands owned or lawfully controlled by the applicant.

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- 7. The applicant shall ensure that effluent is not discharged within 300 metres of any dwelling not owned or lawfully controlled by the applicant.
- 8. The applicant shall ensure that effluent is not discharged within 60 metres of any property boundary, surface watercourse or well.
- 9. The applicant shall ensure that irrigation with sewage effluent takes place in accordance with the following:
  - a) on a stubble field or a worked stubble field in the fall after the growing season has ended; or,
  - b) on a cultivated summerfallow field; or,
  - c) on grassland which will not be utilized for hay, grazing or similar use during or for a least:
    - i) 30 days prior to grazing by dairy cattle;
    - ii) 7 days prior to grazing by livestock other than dairy cattle;
  - d) on agricultural crops where:
    - i) irrigation does not take place during or for at least7 days prior to harvesting of the crops;
    - ii) only forage crops, cereal grain or oil seed crops are grown on effluent irrigated lands provided that where corn is grown it is used solely for silage;
  - e) if surface ponding or surface runoff occurs during irrigation the gross depth of effluent applied during any application of effluent shall be reduced;
  - f) a period of not less than 10 continuous hours during any 24 hour period is provided where no application of sewage effluent is made.
- 10. The applicant shall prior to the construction of dykes for the wastewater treatment lagoon:
  - a) remove all organic topsoil from the area where the dykes will be constructed; or,
  - b) 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 wastewater treatment lagoon system with clay or other suitable material such that all interior surfaces of the wastewater treatment lagoon system 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 wastewater treatment lagoon to hydraulic conductivity tests, the number and location of 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 wastewater treatment lagoon system for hydraulic conductivity in a manner and by an insitu field test method as prescribed by an Environment Officer.
- 13. The applicant shall, not less than 2 weeks before the wastewater treatment lagoon system is placed in operation, submit to the Director the results of the tests carried out pursuant to clause 12.
- 14. The applicant shall, in case of physical or mechanical breakdown of the wastewater collection or treatment system:a) notify the Director immediately;
  - b) identify the repairs required to the wastewater collection or treatment system;
  - c) complete the repairs in accordance with the written instructions of the Director.

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Director Environmental Management Services

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