Environment Act Licence

Manitoba Environment and Workplace Safety and Health

Licence No. 1223

Issue Date September 9, 1988

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

THIS LICENCE IS ISSUED TO:

NORRIS HOLDING CO. LTD/GREEN ACRES COLONY FARMS; APPLICANT

The following limits, terms, and conditions shall be complied with in connection with the construction and operation of a wastewater collection system and a wastewater treatment lagoon located on W1/2 of Section 17-7-17 WPM and with discharge of treated effluent to a ravine that discharges into the Souris River or by irrigation onto agricultural land.

1. The applicant shall ensure that all sewage generated within the farm site is directed toward the wastewater treatment lagoon.

2. The applicant shall ensure that no livestock waste 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;

   (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;

   (d) during the period from the 1st day of November of any year to the 15th day of May of the following year unless prior approval is given by the Director;

   (e) when flooding from any cause is occurring along the drainage route;

   (f) when it will cause or contribute to flooding in or along the drainage route;

   (g) where the rate of discharge exceeds 10 litres per second.

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 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 ensure that, when effluent is disposed of by irrigation:

   (a) effluent 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 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.

6. 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 the written instructions of the Director.

7. 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, provided all the lagoon dykes are lined with clay or other suitable material as required by Clause 8 to a minimum thickness of one metre measured perpendicular to the face of the side wall.

8. The applicant shall construct the wastewater treatment lagoon 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 1×10^{-7} centimetres per second or less.

9. The applicant shall arrange with an Environment Officer a mutually acceptable time and date for any required soil sampling.

10. 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 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 for hydraulic conductivity by an insitu field test method as prescribed by an Environment Officer.

11. The applicant shall, not less than 2 weeks before each cell of the wastewater treatment lagoon is placed in operation, submit to the Director the results of the tests carried out pursuant to Clause 10.

12. The applicant shall complete the construction of the second cell of the wastewater treatment lagoon on or before September 1, 1989.

13. The applicant shall, install a fence around the wastewater treatment lagoon to limit access by the public.

C.B. Orcutt
Director
Environmental Control Services

FILE NO: 2896.00