

Environment Act Licence

Manitoba
Environment



Licence No. 1399
Issue Date AUGUST 23, 1990

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

THIS LICENCE IS ISSUED TO:

DEPARTMENT OF NATURAL RESOURCES: APPLICANT
(BRERETON LAKE WASTEWATER TREATMENT LAGOON)

The following limits, terms, and conditions shall be complied with in connection with the construction and operation of the phase 1 construction of a wastewater treatment lagoon located in Section 32-Township 11-Range 15 EPM in the Whiteshell Provincial Park and with discharge of treated effluent into a wetland draining into the Rennie River:

1. 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 phosphorus content is in excess of 1.0 milligrams per litre;
 - (d) where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample; and
 - (e) between the first day of June of any year and the first day of May of the following year.
2. The Applicant shall operate and maintain the wastewater treatment lagoon in such a manner that:
 - (a) the release of offensive odours is minimized;

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- (b) the organic loading on the primary cell of the wastewater treatment lagoon, 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.
- 3. The Applicant shall, in case of physical or mechanical breakdown of the wastewater treatment system:
 - (a) notify the Director immediately;
 - (b) identify the repairs required to the wastewater treatment system; and
 - (c) complete the repairs in accordance with the written instructions of the Director.
- 4. The Applicant shall, prior to the construction of the continuous clay core for the lagoon dykes, remove all organic top soil and organic material from the area where the dykes will be constructed.
- 5. The Applicant shall construct a structurally stable and continuous clay core for all the lagoon dykes, except the centre dyke between the cells, having a hydraulic conductivity of 1×10^{-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.
- 6. The Applicant shall construct a structurally stable centre dyke between the adjoining cells with clay or other suitable material having a hydraulic conductivity of 1×10^{-5} centimetres per second or less.
- 7. 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.
- 8. The Applicant shall advise the designated Environment Officer, one week prior to the intended commencement of construction of the clay core.

9. The Applicant shall subject undisturbed soil samples from the clay core wall and the under lying in-situ clay, 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.
10. The Applicant shall install a fence around the wastewater treatment lagoon to limit access.
11. The Applicant shall construct an all weather access road and dumping facility for truck hauled sewage. The dumping facility shall be constructed with a smooth hard surface that can be easily washed free of solids and maintained in a sanitary condition.
12. The Applicant shall, on or before the 1st of September, 1991, provide to the Director "as constructed" drawings of the wastewater treatment lagoon and all appurtenances.



Larry Strachan, P. Eng
Director
Environment Act

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