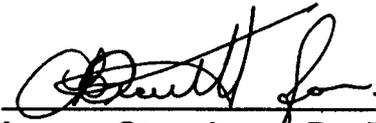(d)   organic loading on the primary cell of the wastewater treatment lagoon, in terms of the five day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day; and

(e)   notwithstanding the other provisions of this Licence, there is no discharge of effluent to the environment from the primary cell of the wastewater treatment lagoon at any time.

3.   Subject to Clause 4, 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 suspended solids content of the effluent is in excess of 30 milligrams per litre;

(c)   where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per l00 millilitres of sample;

(d)   where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per l00 millilitres of sample;

(e)   to a natural watercourse, between the 1st day of November of any year and the 1st day of October of the following year;

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

(g)   when the effluent discharge will cause or contribute to flooding in or along the drainage route.

4. The Applicant shall, prior to using the effluent from the wastewater treatment lagoon to irrigate the Hamiota Golf Course, ensure that:

   (a) the effluent has been subjected to secondary treatment;

   (b) the effluent has been retained in an isolated storage pond for not less than 60 days;

   (c) either:

   (i) the fecal coliform content of the effluent, in terms of the MPN Index, is not in excess of 14 per 100 millilitres of sample; or

   (ii) the effluent contains a free chlorine residual of not less than 0.5 milligrams per litre after not less than 30 minutes of contact time;

   (d) the golf course is closed to the public during the irrigation operation;

   (e) only low angle spray nozzles are used in the irrigation system;

   (f) permanent signs having letters not less than 5 centimetres high are installed and maintained at all access points to the golf course advising of the use of treated effluent for irrigation; and

   (g) irrigation takes place only when weather conditions and irrigation spray locations are such that effluent will not be carried onto public roadways or onto neighboring private property.

5. The Applicant shall, prior to the construction of the dikes for the wastewater treatment lagoon:

    (a) remove all organic topsoil from the area where the dikes 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 dike will be built, provided all the lagoon dikes are lined with clay or other suitable material as required by Clause 6, to a minimum thickness of one metre measured perpendicular to the face of the side wall.

6. The Applicant shall construct the wastewater treatment lagoon system 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.

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 either:

    (a) subject undisturbed soil samples, from each cell of the completed expansion to the wastewater treatment lagoon, 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; or

(b)   where undisturbed soil samples cannot be taken, test the soil of 4 plane surfaces from each cell of the completed expansion to the wastewater treatment lagoon, for hydraulic conductivity by an insitu field test method as prescribed by the designated Environment Officer.

9.   The Applicant 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 8.

10.   The Applicant shall install and maintain a fence around the wastewater treatment lagoon to limit access.

11.   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 written instructions of the Director; and

(d)   discontinue the use of the effluent for irrigation or storage in water hazard impoundments on the golf course.

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12.   Environment Act Licence No. 1090 is hereby rescinded.

Larry Strachan, P. Eng.
Director
Environment Act

FILE : 81.20

Manitoba

Client File: 81.30

June 4, 1991

Mayor Don Mennie
Village of Hamiota
Box 100
HAMIOTA, Manitoba
R0M 0T0

Dear Mayor Mennie:

RE: VARIATION TO ENVIRONMENT ACT LICENCE NO. 1090

In your letter of April 4, 1991 you indicated that the Village would like to alter the operation of the wastewater treatment lagoon by utilizing the 4th cell of the lagoon system as the isolated storage cell for effluent irrigation water. The letter has been reviewed pursuant to Section 14 of The Environment Act and it has been determined that the alteration is of a minor nature and that changes in the Environment Act Licence will be required.

Approval of the alteration is granted subject to the Applicant complying with the revised Licence (copy attached).

If you have any questions on this matter please contact Mr. Ron Slater at 748-2321.

Yours truly,

Larry Strachan, P. Eng.
Director
Environment Act.

Attachment

cc: Ron Slater
cc: Distribution List