Environment Act Licence Manitoba Environment



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lss	sue Date	JULY 24, 1990	
In accordance with the Manitoba Environment Act (C.C.S.M. c. E125)	(REVISE	D: NOVEMBER 14, 1	.990)
THIS LICENCE IS ISSUED TO:			

VILLAGE OF POWERVIEW; APPLICANT STAGE 2 LICENCE

The following limits terms and conditions shall be complied with in connection with the operation of a wastewater collection system and a wastewater treatment lagoon located on L.S. 1 and 2, Section 19-18-10 EPM in the Brightstone Sand Hills Provincial Forest and with discharge of treated effluent to a municipal drainage ditch and thence to the Winnipeg River:

- 1. The Applicant shall ensure that all sewage generated within the Village of Powerview is directed toward the wastewater treatment lagoon.
- 2. 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.

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- 3. 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 wastewater treatment lagoon, 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 both the primary and secondary cells, does not exceed 1.5 metres;
 - (d) a minimum freeboard of 1 metre is maintained above the liquid level at all times.
- 4. 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.
- 5. The Applicant shall ensure that prior to construction of the continuous clay core, the construction area is drained to allow for proper compaction of the clay core.
- 6. 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.
- 7. The Applicant shall construct a structurally stable and continuous clay core in all 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-site clay underlying the lagoon structure a minimum of 0.3 metres.
- 8. The Applicant shall construct a structurally stable centre dyke between adjoining cells with clay or other suitable material having a hydraulic conductivity of 1×10^{-5} centimetres per second or less.

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- 9. 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 $1 \ge 10^{-7}$ centimetres per second or less.
- 10. The Applicant shall construct and maintain a compacted clay cover, having a minimum thickness of 0.4 metres, on all dyke surfaces with the exception of drainage windows spaced every 30 metres and located along the inside toe of the perimeter dykes. The drainage windows shall be in direct contact with the insitu peat located within the dykes, shall have surface dimensions of 2 metres by 3 metres, and shall be filled to a depth of 0.4 metres with coarse gravel.
- 11. 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.
- 12. The Applicant shall advise the designated Environment Officer, one week prior to the intended commencement of construction of the clay core.
- 13. The Applicant shall subject undisturbed soil samples, from the clay core wall and the underlying 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.
- 14. The Applicant shall provide and maintain a grass cover on all dykes and shall regulate the growth of vegetation on the dykes and the surrounding firebreak area so that the height of the vegetation does not exceed 0.15 metres on all dykes and 0.3 metres in the firebreak area.
- 15. The Applicant shall install a fence around the wastewater treatment lagoon to limit access.
- 16. The Applicant shall ensure that the drain carrying the effluent to the Winnipeg River is constructed and maintained to provide a minimum slope towards the river of 0.05 percent measured at any location along the base of the drain.
- 17. 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.
- 18. The Applicant shall, on or before the 31st of May, 1991, provide to the Director "as constructed" drawings of the wastewater treatment lagoon and all appurtenances.

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- 19. The Applicant shall coincident with the opening of the new wastewater treatment lagoon system, cause the existing wastewater treatment lagoon system located on Lot 57 of Plan 3159 in part of River Lot 23, Township 23, Range 10 EPM to be placed out of service and shall not thereafter use or allow it to be used for the treatment, storage, or disposal of any contaminant.
- 20. The Applicant shall, on or before the 31st of May, 1991, file a Proposal with the Department to rehabilitate the site of the existing wastewater treatment lagoon.
- 21. This Licence replaces Licence No. 163P and Licence No. 1354 which are hereby rescinded.

Larry^VStrachan Director Environment Act

FILE: 3151.10



Environment

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Building 2 139 Tuxedo Avenue Winnipeg, Manitoba, CANADA R3N 0H6

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November 14, 1990

File No. 3151.10

Mr. A.J. Poetker, P. Eng. Poetker MacLaren Lavalin 106-B Scurfield Blvd. Winnipeg, Manitoba R3Y 1G4

Dear Mr. Poetker,

Re: Powerview Lagoon -Proposed Alteration

In response to your communications of October 15 and November 2, 1990 in which you indicated the proposed alteration to the design of the wastewater treatment lagoon, the proposal has been reviewed pursant to Section 14 of The Environment Act and has been determined to be minor in nature.

The proposed alteration will require the following change to Clause 10 of Environment Act Licence1386:

"10. The Applicant shall construct and maintain a compacted clay cover, having a minimum thickness of 0.4 metres, on all dyke surfaces with the exception of drainage windows spaced every 30 metres and located along the inside toe of the perimeter dykes. The drainage windows shall be in direct contact with the insitu peat located within the dykes, shall have surface dimensions of 2 metres by 3 metres, and shall be filled to a depth of 0.4 metres with coarse gravel." Approval of the proposed alteration is granted subject to the Village of Powerview complying with Clause 10 of the revised Licence.

If you have any questions on this matter please contact Mike Van Den Bosch at 945-7015.

Yours truly,

Larry Strachan, P. Eng. Director Environmental Approvals Branch

cc: Village of Powerviewcc: MWSBcc: Public Registriescc: Distribution List

ATTACHMENT