

Sustainable Development

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File: 4929.10

May 24, 2017

Santokh Randhawa, P.Eng.
Director of Water & Waste
RM of Springfield
100 Springfield Centre Drive
Oakbank, MB R0E 1J0

Dear Mr. Randhawa:

Re: Rural Municipality of Springfield Wastewater Treatment Lagoon – Total Coliform Analysis and Limit – Environment Act Licence No. 2910

I am responding to your April 20, 2017 Notice of Alteration letter wherein it is requested that total coliform content not be a required limit relative to the operation and maintenance of the Rural Municipality of Springfield wastewater treatment lagoon (lagoon). Environment Act Licence No. 2910 applies to this lagoon.

The letter indicates that recent difficulties have been encountered in relation to test methods used in some laboratories for total coliform content of effluent. The letter goes on to point out that testing for total coliform count of effluent is not a requirement of Manitoba's current wastewater effluent standards. The request is to remove the effluent quality requirement respecting total coliform content at discharge as indicated by Clause 31 c) of the Licence. Note that Clause 37 c) also identifies a requirement related to total coliform content in that it identifies a need for grab samples to be obtained and analyzed for total coliform content.

Upon review of the Notice of Alteration and the Licence, I have decided that the environmental impacts of the proposed alteration are insignificant. Accordingly, pursuant to Section 14(2) of *The Environment Act*, I hereby approve the request to remove the total coliform count as a limit and as an analysis as conditions in this Licence.

Clause 31 of the Licence is hereby replaced with the following:

31. The Licencee shall:
- a) not discharge effluent from the wastewater treatment lagoon:
 - i) where the organic content of the effluent, as indicated by the five day carbonaceous biochemical oxygen demand, is in excess of 25 milligrams per litre;
 - ii) where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;

- iii) where the total phosphorus content of the effluent is in excess of 1.0 milligram per litre;
 - iv) where the total suspended solids content of the effluent is in excess of 25 milligrams per litre, unless the exceedance is caused by algae;
 - v) where the unionized ammonia content of the effluent is in excess of 1.25 milligrams per litre expressed as nitrogen (N), at $15^{\circ}\text{C} \pm 1^{\circ}\text{C}$;
 - vi) between the 1st day of November of any year and the 15th day of June of the following year;
 - vii) when flooding from any cause is occurring along the effluent drainage route; or
 - viii) when such a discharge would cause or contribute to flooding in or along the effluent drainage route.
- b) when chlorine is used as a disinfecting agent:
- i) notify the Director in advance;
 - ii) dechlorinate effluent prior to discharge;
 - iii) obtain grab samples prior to and daily during the discharge period and have them analyzed for total residual chlorine; and
 - iv) not discharge effluent when the concentration of the total residual chlorine is in excess of 0.02 milligrams per litre.

Clause 37 of the Licence is hereby replaced with the following:

37. The Licencee shall, prior to each effluent discharge campaign from the wastewater treatment lagoon, obtain grab samples of the treated wastewater and have them analyzed for:
- a) organic content as indicated by the five-day carbonaceous biochemical oxygen demand and expressed as milligrams per litre;
 - b) fecal coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
 - c) total phosphorus content expressed as milligrams per litre;
 - d) total suspended solids content expressed as milligrams per litre;
 - e) unionized ammonia nitrogen expressed as milligrams per litre; and
 - f) if the effluent has been chlorinated, the total residual chlorine content as determined at the wastewater treatment lagoon site at the time of sampling and expressed as milligrams per litre.

You will note that the above revised clauses include altered and new criteria regarding five-day carbonaceous biochemical oxygen demand (replaces the five-day biochemical oxygen demand criterion), total phosphorus, total suspended solids, unionized ammonia, and chlorine. These altered and new criteria reflect the requirements of *Manitoba Water Quality Standards, Objectives and Guidelines - Regulation 196/2011* and Canada's SOR/2012-139, *Wastewater Systems Effluent Regulations*, and appear in most new and revised Environment Act Licences for wastewater treatment lagoons in Manitoba. My January 8, 2016 letter previously reminded the Rural Municipality of Springfield of the need for the wastewater effluent to meet the 1.0 mg/L total phosphorus limit prior to discharge.

All other clauses in Environment Act Licence No. 2910 remain in effect. This approval is contingent on your receiving an updated Environment Act Licence to be issued in the near future.

If you have any questions or would like to discuss the foregoing, please contact Robert Boswick, Environmental Engineer, at 204-945-6030 or at Robert.Boswick@gov.mb.ca .

Yours sincerely,



Tracey Braun, M. Sc.
Director
Environment Act

c: Don Labossiere/Donna Smiley/Yvonne Hawryliuk – Environmental Compliance and Enforcement, Manitoba Sustainable Development
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