



Environment and Climate

Environmental Approvals Branch
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File Nos.: 2633.10, 191.10, and 190.50

June 26, 2023

Mitch Duval, Chief Administrative Officer
Rural Municipality of Ritchot
352 Main Street, St. Adolphe, MB R5A 1B9
CAO@Ritchot.com

Dear Mitch Duval:

Re: Request for Adjusted Lagoon Effluent Discharge Periods

In an April 17, 2023 letter, the Red-Seine-Rat Wastewater Co-operative (RSRWC) requested an adjustment of the discharge periods of wastewater treatment lagoons serving the communities of Ste. Agathe, St. Adolphe, and Ile des Chenes / Grande Pointe in the RM of Ritchot for the next three years. Environment Act Licences No. 2036, 2776 R, and 2577 RRR apply to these lagoons respectively.

The request is to revise the discharge periods for each of these lagoons for discharge between May 15th and November 30th of each year to allow for short-term increases in each of the lagoon's capacities while the RSRWC wastewater treatment plant is being designed and constructed.

I approve the request per Section 14(2) of The Environment Act with the following conditions:

1. The licensee shall operate each lagoon within the terms of its respective licence, only discharging outside of the discharge periods identified in licences when liquid depths in the cells warrant such discharge(s) to the satisfaction of the assigned environment officer.
2. Lagoon discharge(s) between 15th May and 15th June and between the 1st and 15th days of November shall only occur in the same year where operating depths necessitate such discharge(s) to the satisfaction of the assigned environment officer.

3. The licensee shall not discharge effluent from any of these lagoons to the discharge routes:
 - a) 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;
 - 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 suspended solids content of the effluent is in excess of 25 milligrams per litre, unless the exceedance is caused by algae;
 - d) where the concentration of the total phosphorus of the effluent is in excess of 1.0 milligrams per litre;
 - e) where the total ammonia content of the effluent expressed as total ammonia nitrogen (N) in milligrams per litre is in excess of the limits specified in Table 1; and
 - f) where, if chlorine has been added to any cell, the total residual chlorine content is in excess of 0.02 milligrams per litre.

4. The licensee shall, prior to each effluent discharge campaign where lagoon discharge is to occur outside of the discharge period identified in the respective licence, obtain grab samples of the treated wastewater and have them analyzed for:
 - a) the organic content as indicated by the five-day biochemical oxygen demand and expressed as milligrams per litre;
 - b) the organic content as indicated by the five-day carbonaceous biochemical oxygen demand and expressed as milligrams per litre;
 - c) the fecal coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
 - d) the total suspended solids content expressed as milligrams per litre;
 - e) the total phosphorus content expressed as milligram per litre;
 - f) the unionized ammonia nitrogen expressed as milligrams per litre;
 - g) the total ammonia content expressed as total ammonia nitrogen (N) in kilograms per day;
 - h) pH; and
 - i) the total residual chlorine content as determined at the wastewater treatment lagoon site at the time of sampling and expressed as milligrams per litre if any amount of chlorine has been dosed to the cell(s) being discharged.

5. The licensee shall determine the volume of wastewater discharged each day during any discharge campaign from each lagoon that occurs between the 15th day of May and the 15th day of June and/or between the 1st and 15th days of November in the same year.

6. The licensee shall prepare and submit to the assigned environment officer a report of the results of the sample analyses identified in Item 4 and the volumes determined in Item 5 for each spring discharge campaign from each lagoon by not later than the 15th day of July of the same year and for each fall discharge campaign from each lagoon by not later than the 15th day of December of the same year.
7. This approval shall terminate not later than November 16, 2026, unless extended by the director.

The request to have the option to discharge these lagoons throughout the month of November could not be supported due to possible freezing of discharged effluent in surface courses.

All other clauses of each licence remain in effect. This approval is available on the public registry at <https://www.gov.mb.ca/sd/eal/registries/index.html> .

If you have any questions with regard to the above, please feel free to contact Robert Boswick, Senior Environmental Engineer, Environmental Approvals Branch at Robert.Boswick@gov.mb.ca or 204-918-5853.

For questions relating to the ongoing administration of the licence, please contact Allan Cyrenne, Regional Supervisor, Environmental Compliance and Enforcement Branch at EnvCEEastern@gov.mb.ca or 204-485-6410.

Sincerely,

Original Signed By
Siobhan Burland Ross

For
Agnes Wittmann
Director

- c. Kyla L. Kirk
Barry Williamson
Stephen Gordon
Sandra Peters
Robert Boswick
Allan Cyrenne

Table 1 Total Ammonia Effluent Limits

Effluent pH	Effluent Total Ammonia (expressed as N, mg/L)
6.50	48.83
6.60	46.84
6.70	44.57
6.80	42.00
6.90	39.16
7.00	36.09
7.10	32.86
7.20	29.54
7.30	26.51
7.40	22.97
7.50	19.89
7.60	17.03
7.70	14.44
7.80	12.14
7.90	10.13
8.00	8.41
8.10	6.95
8.20	5.73
8.30	4.71
8.40	3.88
8.50	3.20
8.60	2.65
8.70	2.20
8.80	1.84
8.90	1.56
9.00	1.32