

**From:** [Biswanger, Stephen](#)  
**To:** [+WPG530 - Environmental Approvals Branch Director \(CC\)](#); [Winsor, Jennifer \(CC\)](#); [Burland Ross, Siobhan \(CC\)](#)  
**Cc:** [Stott, Sheldon](#); [Colleen Synchyshyn \(neepawacao@wcgwave.ca\)](#)  
**Subject:** Plan for treatment of transferred wastewater at Town of Neepawa Municipal Primary Cell - R3 Innovations Inc. Licence 2870 RRR  
**Date:** June-08-22 2:08:28 PM  
**Attachments:** [Treatment Plan for Transferred Wastewater.pdf](#)

---

**CAUTION: This email originated from an External Sender. Please do not click links or open attachments unless you recognize the source.**  
**ATTENTION: ce courriel provient d'un expéditeur externe. Ne cliquez sur aucun lien et n'ouvrez pas de pièce jointe, excepté si vous connaissez l'expéditeur.**

On behalf of R3 Innovations Inc. and the Town of Neepawa, please find attached the required plan for treatment of wastewater stored at the Town of Neepawa Municipal Primary Cell, transferred from the R3 Innovations Inc. Industrial Wastewater Treatment Facility, as approved by NOA on December 10, 2021. If there are any questions regarding the plan, please contact Sheldon Stott at HyLife.

Best regards,

**Stephen Biswanger** P.Eng.

Environmental Engineer, Senior Associate

Direct: 204-924-7061

Mobile: 204-290-5651

Fax: 204-942-2548

[stephen.biswanger@stantec.com](mailto:stephen.biswanger@stantec.com)

Stantec

500-311 Portage Avenue

Winnipeg MB R3B 2B9



The content of this email is the confidential property of Stantec and should not be copied, modified, retransmitted, or used for any purpose except with Stantec's written authorization. If you are not the intended recipient, please delete all copies and notify us immediately.



Box 10000, 623 Main Street, Neepawa, Manitoba R0J 1H0  
p: 1.204.476.3393 f: 1.204.476.3791 www.hylife.com

June 8, 2022  
File: 111440368

**Attention:**

Director, Environmental Approvals Branch  
Manitoba Conservation and Climate  
1007 Century Street  
Winnipeg, MB R3H 0W4

Dear Director,

**Reference: Notice of Alteration (NOA) Request – Licence 2870 RRR R3 Innovations Inc./Town of Neepawa IWWTF Wastewater Transfer, Neepawa, MB – Plan for Treatment of Wastewater Stored at Municipal Primary Cell**

On November 5, 2021, R3 Innovations Inc. and the Town of Neepawa (co-proponents) requested approval from Manitoba Environment Climate and Parks (MECP) to transfer wastewater from the former Springhill Industrial Wastewater Treatment Facility (SH IWWTF) to the Town of Neepawa's municipal primary cell (Primary Cell) for temporary storage. The purpose of the transfer was to provide directly accessible temporary storage capacity for insufficiently treated wastewater from the R3 Innovations Industrial Wastewater Treatment Facility (R3 IWWTF) at the SH IWWTF during the approved R3 IWWTF refurbishment project. On December 10, 2021, Manitoba Environment Climate and Parks (MECP) granted a Notice of Alteration (NOA) to Environment Act Licence 2870 RRR, allowing the requested transfer to proceed. The terms of the NOA approval included a requirement to provide a plan for treatment of the wastewater transferred to the Primary Cell.

In accordance with the requirements of clause 2 a) in MECP's correspondence of December 10, 2021, R3 Innovations Inc. and the Town of Neepawa provide the following as a plan for treatment of the wastewater previously transferred to the Town of Neepawa's Primary Cell from the former Springhill Industrial Wastewater Treatment Facility (SH IWWTF).

The wastewater treatment plan consists of an initial characterization of the stored wastewater in the Primary Cell and comparison to applicable discharge requirements prior to assessing the feasibility of viable treatment and discharge scenarios. A treatment/discharge alternative will be proposed to MECP for approval, prior to implementation. The steps of the plan are described in further detail below:

**STEP 1) WASTEWATER CHARACTERIZATION**

The wastewater present in the Primary Cell will be characterized to estimate its volume and quality.

**VOLUME OF STORED WASTEWATER**

The volume of wastewater transferred to the municipal treatment facility from the Springhill Industrial Wastewater Treatment Facility (SH IWWTF) between December 10 and December 13, 2021 was approximately 8.9 M USgal or 33,960 m<sup>3</sup>. While the volume of water in the Primary Cell was minimal at the time, the transferred volume relative to the size of the Primary Cell<sup>1</sup>

<sup>1</sup> Existing primary cell volume from Table 1-1 of Associated Engineering 2018, Environment Act Proposal, Town of Neepawa, Manitoba Water Services Board, Town of Neepawa Wastewater Treatment Facility Upgrades, AE#2016-4833, January 2018.



Box 10000, 623 Main Street, Neepawa, Manitoba R0J 1H0  
p: 1.204.476.3393 f: 1.204.476.3791 www.hylife.com

June 8, 2022  
Director of Environmental Approvals  
Page 2 of 4

**Reference: Notice of Alteration (NOA) Request – Licence 2870 RRR R3 Innovations Inc./Town of Neepawa IWWTF Wastewater Transfer, Neepawa, MB**

(approximately 117,000 m<sup>3</sup>) represented less than 30% of the Primary Cell capacity. R3 Innovations will conduct a survey to confirm the estimated volume of wastewater present in the Primary Cell.

**QUALITY OF STORED WASTEWATER**

The quality of the wastewater present in the Primary Cell is expected to be different than the quality of the transferred wastewater due to further degradation of the wastewater and dilution by the prior residual water in the cell as well as evaporation/precipitation. R3 Innovations will collect samples of the wastewater from the Primary Cell in Spring/Summer 2022 to characterize the stored wastewater quality.

**STEP 2) EVALUATION OF DISCHARGE REQUIREMENTS**

R3 Innovations and the Town of Neepawa will determine/evaluate specific discharge or treatment requirements in relation to the R3 IWWTF effluent quality discharge criteria in Environment Act Licence (EAL) 2870 RRR and the Town of Neepawa Municipal Wastewater Treatment Facility EAL 3270 (summarized in Table 1).

**Table 1 Effluent Criteria Summary**

Parameter	R3 IWWTF Limit (EAL 2870 RRR)	Town of Neepawa Municipal Wastewater Treatment System Limit (EAL 3270 – Phase I)
BOD <sub>5</sub>	25 mg/L	25 mg/L
TSS	25 mg/L	25 mg/L
Fecal coliforms	200 MPN /100 mL of sample	N/A
E. coli	200 MPN /100 mL of sample	200 MPN /100 mL of sample
TN	15 mg/L	N/A
TP	1 mg/L	1 mg/L
Total Ammonia	Based on pH per schedule 1 of EAL	Based on Load limit per Table 1 of EAL
Unionized Ammonia	N/A	1.25 mg/L
Discharge Period	Continuous	May 16-October 31
EAL – Environment Act Licence MPN – Most Probable Number		



Box 10000, 623 Main Street, Neepawa, Manitoba R0J 1H0  
p: 1.204.476.3393 f: 1.204.476.3791 www.hylife.com

June 8, 2022  
Director of Environmental Approvals  
Page 3 of 4

**Reference: Notice of Alteration (NOA) Request – Licence 2870 RRR R3 Innovations Inc./Town of Neepawa IWWTF Wastewater Transfer, Neepawa, MB**

## TREATMENT AND DISCHARGE SCENARIOS

Once the wastewater is characterized and compared with the licence requirements, potential treatment scenarios and actions will be evaluated in a feasibility assessment, including:

**1. If the stored wastewater meets the R3 IWWTF discharge criteria:**

- Discharge the wastewater to the Whitemud River via an existing outfall from the municipal treatment facility during the applicable lagoon discharge period for EAL 3270.
- Remaining sludge would be managed in the Primary Cell as part of ongoing/future town biosolids management planning.

**2. If the stored wastewater does not meet the R3 IWWTF discharge criteria:**

- Apply additional treatment at the Primary Cell to meet EAL 2870 RRR criteria prior to discharge to the Whitemud River via an existing outfall from the municipal facility. This may potentially include mechanical aeration (for ammonia and N) and/or alum addition (for TP removal) prior to discharge to the Whitemud river. Other potentially applicable technologies and treatment methods may be considered at this stage as well.
- Pretreatment at the Primary Cell followed by continued treatment in the municipal system prior to discharge to the Whitemud River via the main municipal outfall. Pretreatment options may be similar to those above but would be reduced in consideration of the treatment capabilities of the municipal system.
- Transfer of up to 33,960 m<sup>3</sup> of wastewater from the Primary Cell back to the SH IWWTF for eventual treatment in the R3 IWWTF by temporary transfer pipeline or by truck. This option would require the treatment/removal of wastewater presently in the SH IWWTF (see separate filing) to provide capacity for the wastewater transfer from the Town municipal Primary Cell.
- Remaining sludge would be managed in the Town of Neepawa's Primary Cell as part of ongoing/future town biosolids management planning.

The feasibility study will identify viable alternatives and provide a recommendation to R3 Innovations and the Town of Neepawa for implementation.

## STEP 3) IMPLEMENTATION OF PROPOSED TREATMENT/DISCHARGE OPTION

R3 Innovations will propose a treatment/discharge scenario to MECP for approval in the form of a NOA request. The NOA will describe the planned treatment scenario and provide an environmental assessment of its incremental effects as well.

Should you require any additional information or clarifications please contact Mr. Sheldon Stott, P.Ag., Senior Director of Corporate Sustainability, HyLife Foods LP.



Box 10000, 623 Main Street, Neepawa, Manitoba R0J 1H0  
p: 1.204.476.3393 f: 1.204.476.3791 www.hylife.com

June 8, 2022  
Director of Environmental Approvals  
Page 4 of 4

**Reference: Notice of Alteration (NOA) Request – Licence 2870 RRR R3 Innovations Inc./Town of Neepawa  
IWWTF Wastewater Transfer, Neepawa, MB**

Regards,



Sheldon Stott, P.Ag.  
Senior Director of Corporate Sustainability  
HyLife Foods LP

c. Colleen Synchyshyn, CAO, Town of Neepawa  
Stephen Biswanger, Stantec