



**Former Springhill Farms IWWTF
Primary Cell Liner Replacement
Notice of Alteration**

Final

July 29, 2020

Prepared for:

HyLife Foods Ltd./Town of Neepawa

Prepared by:

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July 23, 2020
File: 111440368

Attention: Ms. Shannon Kohler
Director, Environmental Approvals Branch
Manitoba Conservation and Climate
1007 Century Street
Winnipeg, MB R3H 0W4

Dear Ms. Kohler,

Reference: NOA Request – Licence 2870 RRR R3 Innovations Inc./Town of Neepawa IWWTF, Former Springhill Farms IWWTF Primary Cell Liner Replacement, Neepawa, MB

In accordance with Section 14(1) of *The Environment Act*, HyLife Foods LP and the Town of Neepawa, by way of this letter and supporting information, provide notice to the Director of a proposed alteration to a portion of the former Springhill Farms Industrial Wastewater Treatment Facility (IWWTF) in Neepawa, Manitoba.

In accordance with the MCC accepted Remediation Plan (December 2019), R3 Innovations Inc. and the Town of Neepawa propose to install a new synthetic liner within the existing primary treatment cell at the former Springhill Farms IWWTF. The facility has not provided operational treatment since the dedicated R3 Innovations IWWTF was constructed in 2009 on the adjacent parcel to the west.

The former primary cell is to be relined to address suspected potential historical leakage identified as a result of groundwater monitoring at the site, and will provide future secure temporary/emergency wastewater storage capacity for the R3 Innovations IWWTF in accordance with Clause 33 of Licence No. 2870 RRR. No changes are proposed to the licensed processing capacity or operations at the R3 IWWTF or the HyLife pork processing plant as a result of this work.

The proposed Project is integral to the remediation plan accepted by MCC in December 2019, to address groundwater impacts in the area. Residual adverse operational effects are considered negligible to low. On the basis of the studies undertaken, and information available to date as presented in the attached report, the adverse environmental effects of proposed alterations are expected to be not significant. Accordingly, a \$500 application fee will follow from HyLife Foods LP in support of the two hard copies and one electronic copy of the submission.

Should you require any additional information or clarifications please do not hesitate to contact Mr. Sheldon Stott, P.Ag., Senior Director of Corporate Sustainability, HyLife Foods LP, or Mr. Stephen Biswanger, P.Eng., Stantec Consulting Ltd.

Regards,



Kevin Barkman, VP Infrastructure & Environmental Affairs


Attachment: One NOA Form and Supporting Information
Two hard copies and one electronic copy of NOA


c. Stephen Biswanger, Stantec

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Executive Summary

HyLife Foods Ltd./Town of Neepawa (HyLife) is proposing to install a new synthetic liner within the existing primary treatment cell at the former Springhill Farms Industrial Wastewater Treatment Facility (IWWTF). The former IWWTF is located on land owned by the Town of Neepawa, immediately north of HyLife's pork processing plant in Neepawa, Manitoba. The former IWWTF site is zoned "MH – Industrial Heavy" under the Town of Neepawa Zoning By-law No. 3184-18 and was constructed in 1987. The facility has not provided operational treatment since the R3 Innovations IWWTF was constructed in 2009 on the adjacent parcel to the west.

The former primary cell is to be remediated and relined to address suspected potential leakage identified by groundwater impacts in the area, and provide future secure temporary/emergency wastewater storage capacity as per Clause 33 of Licence No. 2870 RRR for the R3 Innovations IWWTF (R3 IWWTF). Prior to installing the new liner, HyLife will drain, remove the sludge, and remediate the structure of the primary cell as part of the Manitoba Conservation and Climate (MCC)-accepted remediation plan. HyLife plans to commence the proposed primary cell liner replacement project in the late summer of 2020 pending receipt of approval from MCC.

No changes are proposed to the licensed processing capacity at the R3 IWWTF or the HyLife pork processing plant as a result of this work.

As required under *The Environment Act* (Manitoba), an application for Notice of Alteration (NOA) to the relevant existing Environment Act Licence (No. 2870 RRR) is submitted with supporting information to Manitoba Conservation and Climate (MCC) for consideration. This NOA application has been prepared by Stantec Consulting Ltd. (Stantec) on behalf of HyLife. This report documents the relevant portions of the former IWWTF primary cell, the proposed Project, and the potential environmental effects and proposed mitigation measures associated with the Project.

Potential environmental effects of the Project are limited in the construction phase and are considered fairly routine activities (i.e., related to excavation, dewatering, installation of a new synthetic liner, construction noise, etc.). The proposed Project is an integral part of the remediation plan accepted by MCC to address groundwater impacts in the area and will facilitate future secure temporary/emergency wastewater storage capacity for the R3 Innovations IWWTF. Residual adverse operational effects are considered negligible to low.

On the basis of the desktop studies undertaken, and information available to date as presented in this report, the proposed Project is expected to create no significant adverse environmental effects.



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Abbreviations

AMSL	above mean sea level
GHG	greenhouse gas emissions
ha	hectare
HDPE	high density polyethylene
IWWTF	Industrial Wastewater Treatment Facility
km	kilometre
LAA	local assessment area
l/s	litres per second
m	metre
MCC	Manitoba Conservation and Climate
mg/L	milligrams per litre
mm	millimetre
MNA	monitored natural attenuation
MSD	Manitoba Sustainable Development
NO ₃	dissolved nitrate
NOA	Notice of Alteration
PS	project site
PTH	Provincial Trunk Highway
RAA	regional assessment area
sq. m.	square metres
VC	valued component



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1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

HyLife Foods/Town of Neepawa (the proponent) is planning to install a new synthetic liner system to remediate the existing clay-lined former primary treatment cell (the Project) at the former Springhill Farms Industrial Wastewater Treatment Facility (former IWWTF). The former IWWTF is located on land owned by the Town of Neepawa immediately north of the HyLife pork processing plant (Figure 1-1a; Appendix A). The cell is to be relined to address suspected leakage in accordance with the Manitoba Conservation and Climate (MCC)-accepted remediation plan, dated December 30, 2019. The Project will also provide future secure temporary/emergency wastewater storage capacity as per Clause 33 of Licence No. 2870 RRR for the R3 Innovations IWWTF (R3 IWWTF) (Appendix B). Prior to installing the new liner, HyLife will remediate the structure of the primary cell. The majority of the cell contents were previously transferred to the adjacent cells to facilitate the Project. The sludge/biosolids that were transferred to the adjacent cells will be removed and managed via a land application program that will be the subject of a separate Environment Act Licence application process. HyLife plans to commence the Project in the late summer of 2020 pending approval of this Notice of Alteration (NOA) application.

Section 14(1) of *The Environment Act* requires a proponent to notify the Director (for Class 1 and 2 developments) if the proponent intends to alter a licensed development so that it no longer conforms to licence conditions or has the potential to change the environmental effects (Manitoba Sustainable Development [MSD] 2016). The key consideration for assessing a NOA is the significance of the environmental and human health effects resulting from the alteration and whether there is sufficient detail to allow the Director to determine whether the effects of the alteration are significant, insignificant, or non-existent (MSD 2016).

This NOA request has been prepared by Stantec Consulting Ltd. (Stantec) on behalf of the proponent and is submitted to MCC in support of a request for NOA to the existing licence for the R3 IWWTF (Licence No. 2870 RRR). The former IWWTF was governed by Environment Act Licence No. 2870 (issued February 26, 2009) which has since been rescinded and replaced by revised licences. Treatment facilities are considered Class 2 Developments under the Classes of Development Regulation (MR 164/88).

This report documents the existing cell at the former IWWTF facility, the proposed Project, and the potential environmental effects and planned mitigation measures associated with construction and operation of the altered facility.

1.2 THE PROPONENT

For the purposes of development licensing, the proponent is HyLife Foods/Town of Neepawa (hereafter “HyLife”).



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For further information regarding the former IWWTF please contact the following:

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1.3 LAND OWNERSHIP AND PROPERTY RIGHTS

The former IWWTF is located in the Town of Neepawa on property owned by the Town on SW35-14-15 WPM. The legal description for the subject property is described as Lot 1, Plan 23208 (NLTO). Current Certificate of Title for the property (the Site) is as noted in CT# 2065009 (Appendix C). The former IWWTF currently occupies approximately 11.2 ha.

1.4 EXISTING CONDITIONS

The existing environment in the Project area has been described in previous HyLife NOA submissions, specifically within the AECOM 2013 NOA and the Stantec 2016 NOA. Readers are referred to these NOAs for further details if required, a general summary of existing environmental conditions is provided below.

1.4.1 Topography and Drainage

With the exception of the elevated treatment cells of the former IWWTF, the Site is generally flat and at grade with the adjacent properties and roadways to the east, west, and south, except for a coulee on the eastern portion of the Site, approximately 230 m east of the former IWWTF, that generally runs south to north, discharging into the Whitemud River. To the north, the topography slopes down steeply (approximately 20 m) into the Whitemud River valley (Stantec 2019a).



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Based on an available topographic map (Natural Resources Canada 2019) and observed site topography, regional surface drainage is generally to the north, towards the Whitemud River, located approximately 800 m north of the Site.

1.4.2 Geology and Soils

Based on the Reconnaissance Soil Survey Report (No. 7) of the Carberry Map Sheet Area (Ehrlich et al., 1957), the native surficial soils of the Site are described as Stockton fine sandy loams. The soil surface texture varies from loamy sand to very fine sandy loam, and drainage is good.

The Site occurs over an area with underlying geologic deposits of the Favel Formation; calcareous speckled shale (second Specks), minor limestone, bentonite and oil shale of the Mesozoic period. The Favel Formation is a stratigraphic unit of Upper Cretaceous age in the Western Canadian Sedimentary Basin. The thickness of the Favel Formation varies from 15 to 45 m (Manitoba Geological Survey 2006).

1.4.3 Groundwater

Groundwater in the Neepawa and Area Planning District, which encompasses the Project, is generally considered to be unevenly distributed. Groundwater is either not available or of very limited supply in a fairly extensive area east of Provincial Trunk Highway (PTH) 5 north of Neepawa and in a few small areas northwest and west of Neepawa (Province of Manitoba 1979). Well yields in the District are generally less than 1.0 L/s, with a few areas ranging from 10L/s to 50 L/s (south of Neepawa). Poor to unpotable groundwater is common in an area east of PTH 5 and at the southwest corner of the District. Thin sand aquifers are predominant at, and in areas adjacent to, the Site with yields ranging from very low to moderate (0.1L/s to 1.0 L/s). Quality ranges from good to poor near the Site (Province of Manitoba 1979).

A 2019 groundwater monitoring program at the Site included collection of samples from 18 monitoring wells in the vicinity of the former IWWTF. Samples were analyzed for a range of parameters including total and dissolved phosphorus, dissolved sulphate, dissolved chloride, dissolved nitrate, dissolved nitrite, and nitrate+nitrite parameters. The results of the analyses were reported separately to MCC as part of the proposed remedial action plan.

Samples from four monitoring wells had dissolved nitrate concentrations higher than the referenced criteria of 45 mg/L (the highest at 240 mg/L). The highest dissolved chloride concentration in samples collected from the monitoring wells was 190 mg/L (\leq 250 mg/L Health Canada 2019 Guidelines, Aesthetic Objective) while elevated dissolved sulphate concentrations were noted in samples from four monitoring wells, the highest being 1,300 mg/L (Health Canada 2019 Guidelines, Aesthetic Objective of \leq 500 mg/L) (Stantec 2019a).

The encountered groundwater elevations varied from 356.70 m above mean sea level (m AMSL) to 362.91 m AMSL across the Site. Based on the results of the groundwater elevation survey, the apparent direction of near-surface groundwater flow is to the northeast (Stantec 2019a).



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1.4.4 Land Use

The former IWWTF has been in existence since 1987 on part of SW35-14-15W. The land uses adjacent to former IWWTF site include a mix of commercial, industrial, agricultural restricted, and open space. The Project site is subject to the Town of Neepawa Zoning By-Law No. 3184-18 and the former IWWTF is an approved conditional use. The former IWWTF area, as part of the treatment facility compound, is considered previously disturbed.

1.4.5 Infrastructure and Services

The R3 IWWTF discharges treated effluent to the Whitemud River via a dedicated outfall that discharges to an existing low-lying wetland adjacent to the Whitemud River, northwest of the pork processing plant. Conditions for the use of the former IWWTF for temporary/emergency wastewater storage are included in Clause 33 of Environment Act Licence No. 2870 RRR:

“33. The Licensees shall:

- a) transfer wastewater to the existing wastewater treatment lagoon at the Development, only under exceptional circumstances, for temporary wastewater storage purposes only;*
- b) transfer the stored wastewater from the existing wastewater treatment lagoon to the wastewater treatment plant for treatment and discharge only through the final discharge point; and*
- c) notify the Environment Officer on each occasion when the transfer of wastewater to the existing wastewater treatment lagoon occurs and keep a record of each transfer.”*

1.5 PREVIOUS ALTERATIONS/STUDIES

Since 1987, after acquiring the former Springhill Farms processing plant in 2008, HyLife constructed, and progressively made modifications to the R3 Innovations IWWTF as summarized in Table 1-1.

Table 1-1 Former IWWTF Approvals and R3 Innovations IWWTF Studies 1987-2019

Date	Approvals/Studies/Actions	Approvals / Study / Action Completion
1987	Springhill Farms obtained approval for operation of the former IWWTF under Clean Environment Commission (CEC) order No. 1103VC.	July 1987
2008	Original approval for the R3 IWWTF with a discharge capacity of 1,520 m ³ /day, replacing the former IWWTF as the dedicated treatment facility for the pork processing plant.	February 2009
2017	Temporary transfer of truck wastewater from R3 Innovations Inc. facility to Town of Neepawa municipal wastewater treatment lagoon system for period of 5-6 weeks.	March 2017



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Table 1-1 Former IWWTF Approvals and R3 Innovations IWWTF Studies 1987-2019

Date	Approvals/Studies/Actions	Approvals / Study / Action Completion
2019	Removal of sludge solids from the cells of the existing former IWWTF.	September 2019
2019	Delineation of previously identified groundwater impacts in the vicinity of the former IWWTF, and submission of a remedial action plan.	December 2019
2020	MCC acceptance of groundwater remediation plan.	December 2019

1.6 SCOPE OF THE ASSESSMENT

1.6.1 Spatial and Temporal Boundaries

The former IWWTF is located immediately north of the HyLife Foods pork processing plant and immediately east of the R3 Innovations IWWTF, along PTH 16 in the Town of Neepawa in southwestern Manitoba. For the purposes of this environmental assessment, the Project site, Local Assessment Area, and Regional Assessment Area are generally defined consistent with previous assessment boundaries for the R3 Innovations IWWTF. The temporal boundaries for the assessment are defined as Construction phase, Operation phase, and Decommissioning phase. Spatial and temporal boundaries are described in Table 1-2.

Table 1-2 Spatial and Temporal Boundaries

Spatial Boundaries	Temporal Boundaries
Project Site (PS) – the physical footprint of the former IWWTF primary cell (approx. 0.4 ha) within the subject property, part of SW35-14-15W (see Figure 1-1b; Appendix A).	Construction phase – a period of one month in 2020 over which construction is planned to occur.
Local Assessment Area (LAA) – area up to a three-km radius from the Project site (area over which direct Project effects would be expected to occur, see Figure 1-1b; Appendix A).	Operation phase – the period over which the facility will be in operation, at least 50 years.
Regional Assessment Area (RAA) – area up to a ten-km radius from the Project site (area over which direct effects that act on the PS are compared to determine significance of residual effects, see Figure 1-1c; Appendix A).	Decommissioning phase – there are currently no plans for the primary cell at the former IWWTF to be decommissioned. Should decommissioning occur at some point in the future, it would be anticipated to consist of removing cell contents and remediation of the site. Decommissioning would be conducted according to licence conditions and regulatory requirements at the time.

1.6.2 Assessment Approach

This assessment was completed to meet the requirements of a request for NOA and includes assessing project-specific environmental effects. The assessment focuses on valued components (VCs), which are



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environmental components of certain value or interest to regulators and other parties and are identified based on the potentially affected biophysical and socio-economic elements. Project-related effects on these VCs are assessed sequentially in the assessment. Residual effects are characterized using specific, predetermined criteria (i.e., direction, magnitude, geographical extent, duration, frequency, reversibility, and ecological/socio-economic context).

1.6.2.1 Selection of Project Interactions and Valued Components

Biophysical and socio-economic VCs that could be affected through interactions of the environment and the Project are identified to scope the assessment. The rationale for selecting each VC is explained and potential general interactions between the Project and VCs are identified in Table 1-3.

Table 1-3 Designation of Valued Components

Valued Component	Potential Project Interaction	Rationale for Exclusion or Inclusion and Project Potential Effect
Air quality/greenhouse gas (GHG) emissions	x	<p>Minor air emissions are anticipated from construction activities related to on-site vehicle and equipment use for regrading the cell and installation of the synthetic liner. Air emissions will also be related to truck usage on-site for delivery of materials during construction and intermittent transfer of wastewater to/from the remediated cell and the R3 IWWTF during operation. Both construction and operation emissions are expected to be negligible in the context of existing Site emissions and operational traffic at the Site.</p> <p>Construction and operation activities can contribute to GHG emissions from on-site equipment and truck usage, including GHG generation (i.e., methane) from wastewater and sludge storage. Emissions, however, will be small due to the small number of vehicles involved (estimated to be less than 5 pieces of equipment operating at any time) and the limited construction duration (one month) and would result in negligible GHG emissions in the context of other movements in the LAA. GHG emissions generated will be negligible for the period of construction.</p> <p>Operational methane emissions from the cell are anticipated to be negligible as the cell is relatively small and wastewater will only be stored temporarily prior to transfer back to the R3 IWWTF for treatment prior to discharge. As such, the use of the relined cell is not considered a major contributor to GHG emissions.</p>
Soils/terrain	x	Excavation at the primary cell footprint on the PS will result in limited disturbance of soils that have been previously disturbed during past developments on the PS. Accordingly, interaction with soils/terrain in the LAA is considered negligible.
Groundwater/ Surface water	✓/x	<p>The proposed Project will be located on the existing developed property.</p> <p>During construction no effects on groundwater are anticipated with the implementation of standard mitigation measures to prevent spills and good housekeeping practices. Operationally, the proposed liner replacement is a groundwater mitigation</p>



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Table 1-3 Designation of Valued Components

Valued Component	Potential Project Interaction	Rationale for Exclusion or Inclusion and Project Potential Effect
		<p>measure to partially address and improve historical groundwater quality issues at the Site in accordance with the MCC-accepted remediation plan.</p> <p>During construction, stormwater will continue to be managed by surface ditching. The potential for surface runoff and erosion to affect water quality of the Whitemud River (approx. 800 m away) is considered very low and mitigable with implementation of industry-accepted practices such as silt fences and erosion control measures to manage surface drainage flow. Operationally, no changes to surface water quality or quantity are anticipated as a result of the Project. No change in licence conditions for the R3 IWWTF effluent quality or quantity are proposed.</p>
Vegetation	x	No native vegetation is present at the PS and the proposed construction will occur in the former IWWTF primary cell.
Wildlife and wildlife habitat	x	No substantive wildlife or natural wildlife habitat is present on the PS.
Property and land use	x	Site activities occur within an existing industrial area that has supported the current land use for many years. The PS is zoned for the existing/proposed land use. Negative interaction is not anticipated.
Infrastructure and services	x	<p>The proposed liner replacement will generate a negligible increase in traffic in the LAA due to the addition of construction-related vehicles. There will be no need for changes in the provision of municipal infrastructure and services (i.e., external roads, sewer, water) to the PS.</p> <p>The Project would maintain the existing level of service and capability of the R3 IWWTF to temporarily store wastewater in the former primary cell under emergency conditions. No change to the R3 IWWTF capacity or production from the pork processing plant is associated with this work. The change in infrastructure is negligible.</p>
Employment and economy	x	Benefits related to employment and tax generation in the LAA from construction and use of the relined cell will be negligible. No adverse effects related to employment and economy in the LAA are anticipated.
Heritage resources	x	The relined cell will remain in-place within an existing industrial area that is already disturbed; there are no heritage concerns on the PS.
Aesthetics and Noise	x	The PS is located within an existing industrial area; the proposed Project remains consistent with current uses and there will be no substantial change to LAA visual aesthetics. Noise generation will continue to be typical of historical use in the area and no noise complaints have been received by HyLife in several years of operation including during previous construction and facility/plant expansions. The Project will not substantially affect aesthetics or noise in the LAA.



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Table 1-3 Designation of Valued Components

Valued Component	Potential Project Interaction	Rationale for Exclusion or Inclusion and Project Potential Effect
Health and Safety	x	Contractors engaged in the construction phase of the Project will be subject to site specific health and safety plans and worker protection standards and procedures under <i>The Workplace Safety and Health Act</i> (Manitoba). Existing worker health and safety programs will not be affected by operation in the PS. The Project is not anticipated to change the risks for worker/public health and safety.

Following the identification of VCs, an analytical framework is used to evaluate and characterize the potential Project effects on those VCs identified as having a potential Project interaction (identified in bold in Table 1-3), based on standardized criteria to facilitate quantitative (where possible) and qualitative assessment of residual environmental effects.

1.6.2.2 Residual Effects Description Criteria

Terms used to characterize the residual environmental effects are consistent with those summarized in previous HyLife Foods/R3 NOA application documents and are summarized below.

Table 1-4 Characterization of Residual Environmental Effects

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Direction	The long-term trend of the residual effect	Positive — an improvement in the valued component compared with existing conditions and trends Adverse — a decline in the valued component compared with existing conditions and trends Neutral — no change in the valued component from existing conditions and trends
Magnitude	The amount of change in the VC relative to existing conditions	Negligible — no measurable change Low — a change that falls within the level of natural variability Moderate — a measurable change which is unlikely to affect the valued component High — a measurable change which is likely to affect the valued component
Geographic Extent	The geographic area in which an environmental effect occurs	PS — residual effects are restricted to the Project site LAA — residual effects extend into the LAA (up to a 3-km radius of PS) RAA — residual effects extend to other adjacent areas to the property up to a 10-km radius of PS



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Table 1-4 Characterization of Residual Environmental Effects

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Frequency	Identifies when the residual effect occurs and how often during the Project or in a specific phase	Single event — residual effect occurs once throughout the life of the Project Multiple irregular event — residual effect occurs sporadically and intermittently (no set schedule) throughout Multiple regular event — residual effect occurs repeatedly and regularly throughout Continuous — residual effect occurs continuously throughout the life of the Project
Duration	The period of time required until the VC returns to its existing condition, or the effect can no longer be measured or otherwise perceived	Short-term — residual effect restricted to the duration of construction (assumed to be one month) Medium-term — residual effect extends up to 10 years Long-term — residual effect extends for longer than 10 years
Reversibility	Pertains to whether the VC can return to its existing condition after the project activity ceases	Reversible — the effect is likely to be reversed after activity completion and decommissioning Irreversible — the effect is unlikely to be reversed even after decommissioning
Ecological and Socio-economic Context	Existing condition and trends in the area where environmental effects occur	Undisturbed — area is relatively undisturbed or not adversely affected by human activity Disturbed — area has been substantially previously disturbed by human development or human development is still present

1.7 PUBLIC ENGAGEMENT

The former IWWTF is located public land within an area that is appropriately zoned for heavy industrial land use. The treatment cell has been in place at this location since construction in approximately 1987. No formal public engagement is planned beyond the placement of the NOA on the Public Registry for public review and comment if required by MCC.

1.8 FUNDING

HyLife Foods will provide funding for all undertakings related to the Project.



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Project Description
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2.0 PROJECT DESCRIPTION

2.1 EXISTING LICENSED DEVELOPMENT

The former IWWTF has been in existence since construction in 1987, occupying approximately 11.2 ha of land zoned as “MH – Industrial Heavy” under the Town of Neepawa Zoning By-law No. 3184-18. The former IWWTF has not provided operational wastewater treatment for the related pork processing facility since the R3 Innovations IWWTF was constructed in 2009.

The former IWWTF area consists of the subject former primary cell, an anoxic cell, three aerobic cells, a chlorination contact area, rock filter and blower and chlorination buildings. Additional information on the former IWWTF operation can be found in the NOA prepared for the Town of Neepawa’s IWWTF (Earth Tech [Canada] Inc. 2008). A site plan, showing the subject former primary cell to be the southernmost cell of the former IWWTF is provided as Figure 2-1 (Appendix A). The cell is clay-lined, approximately 64 m by 64 m (4,096 sq. m.) with interior slopes of 3.5H:1V and outside slopes of 3H:1V.

The cell contents (sludge) have been relocated to the adjacent cells within the former IWWTF to facilitate the proposed liner replacement upon MCC approval. A biosolids/sludge land application program, to manage the transferred materials, will be the subject of a separate Environment Act Proposal application to be filed separately.

2.2 PROPOSED ALTERATION

The proposed Project consists of the in-place remediation of the former primary cell structure, including liquid removal, regrading, and installation of a new high-density polyethylene (HDPE) liner, to address suspected leakage from the former IWWTF primary cell (see Figure 1-2b). The relined cell will partially address historical groundwater impacts at the Site in accordance with the MCC-approved remediation plan and provide future secure temporary/emergency wastewater storage capacity for the R3 Innovations IWWTF. An existing inlet pipe into the existing cell will be sealed at the new liner and no outlet pipe will be installed with the relined cell. Operationally, wastewater will be pumped into and out of the cell in accordance with licence conditions as necessary.

2.2.1 New Cell Liner

The former IWWTF primary cell will be regraded at its existing location and re-lined with a new HDPE liner as shown in Figure 2-1. The cell will be dewatered to a minimum depth of approximately 0.3 m by transferring the stored wastewater/sludge to the adjacent cells. Existing rubble and riprap stone will then be removed from the cell. Rubble will be disposed of and the riprap will be stockpiled adjacent to the cell for reuse. The existing clay cell interior top of the dikes will be cut back by approximately 1.0 m and the slopes will be regraded from approximately 3.5H:1V to 5H:1V using sand. Excavated material will be placed on the outside of the dikes, compacted, and levelled. The top of the dike will be level all-around.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Project Description
July 29, 2020

Underdrain works will be placed so that the top of the pipe is 100 mm below the liner. The underdrain will consist of a 100 mm HDPE solid pipe beyond the cell connected to 100 mm HDPE perforated drain pipe installed under the bottom of the cell. The solid underdrain pipe will have check valves installed over concrete splash pads (each 1 sq. m. x 150 mm) at both ends to provide drainage to the ground. A 100 mm solid HDPE vent pipe will also be placed along the bottom of the cell with vent piping installed vertically from the top of two sides of the relined cell (see Figure 2-2; Appendix A).

Approximately 1 m of sand bedding will be placed on the bottom of the cell. A new 60-mil HDPE liner will then be installed with an additional 300 mm of cover sand placed overtop the liner. The upper side slopes will have 300 mm of sand bedding on the underside of the liner. All areas will have 300 mm of cover sand. An estimated 5,000 tonnes of sand bedding and cover will be required for the Project. The existing stockpiled riprap will be replaced on the finished upper sand side slopes and the new liner will be anchored on the top of the surrounding dikes that will be finished to a minimum width of 3.0 m. The outside slope of the primary cell will remain at 3H:1V (Stantec 2020a, b).

The new HDPE liner will be tested during installation using a field tensioner, vacuum box, and air pressure equipment. Non-destructive and destructive testing of the liner (i.e., seams) will be undertaken by a qualified installer and documented by the quality inspector (Stantec 2020a). Procedures related to inspection and acceptance are outlined in Section 3.1.2.

2.2.2 Construction Inputs and Outputs

During the construction phase of the proposed Project, materials required may include the synthetic liner and associated materials, field-survey supplies, and raw materials such as sand, water, and fill. Most of these materials will be brought to the Site from other areas. There may be temporary storage of construction materials in lay-down areas on nearby developed areas of the Site. Equipment utilized on-site will be typical for construction, including excavators, loaders, etc.

Outputs during construction will include removal of the residual wastewater/sludge from within the cell to the adjacent cells. Other construction outputs can include surface runoff and fugitive dust and emissions from construction equipment as well as spent packaging materials, solvents, used oils, surplus materials, etc.; these will be regularly transported off the site and disposed of or recycled at approved sites according to applicable regulations.

2.2.3 Operation Inputs and Outputs

During the operational phase of the Project the only anticipated inputs and outputs are the pre-approved temporary/emergency transfers of wastewater into/out of the relined cell and the related equipment requirements to undertake the transfer (trucks and pumps). No other operational inputs or outputs are foreseen. The cell will be approximately 64 m by 64 m (4,096 sq. m. at the top of the cell) and approximately 5 m deep. There will be no domestic waste and/or recyclables generated during operation of the proposed Project.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Project Description
July 29, 2020

2.2.4 Storage of Gasoline and Associated Products

Gasoline and associated products may be temporarily used and stored at the Site for construction equipment during removal of the wastewater from the cell and for cell regrading and liner installation. Gasoline storage during operational wastewater transfer is not anticipated. Storage of gasoline and associated products will meet provincial fuel storage requirements.

2.2.5 Workforce

The size of the construction workforce for the proposed alteration is expected to be minimal with an equipment operator and liner installation personnel. No additional permanent changes to the HyLife or R3 Innovations workforce are anticipated for the Project.

2.2.6 Health and Safety

HyLife/R3 Innovations health and safety plans will be maintained and updated as necessary to accommodate the relined cell.

2.3 PROJECT SCHEDULE

Construction is expected to be completed in approximately one month prior to October 2020. Construction will commence upon approval of the NOA.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Environmental Effects and Mitigation
July 29, 2020

3.0 ENVIRONMENTAL EFFECTS AND MITIGATION

This section provides additional detail regarding the assessment of environmental effects for those valued components identified in Table 1-1 as having potential project interactions. The component included in this assessment is groundwater.

3.1 ASSESSMENT OF ENVIRONMENTAL EFFECTS

3.1.1 Groundwater

Historical groundwater quality impacts were identified on and immediately north of the Site. The areal extent of dissolved nitrate (NO_3) impacted groundwater was defined using the dissolved NO_3 concentrations at each of the monitoring wells and comparing to 45 mg/L, the applicable Health Canada (2019) Maximum Acceptable Concentration Guideline for dissolved NO_3 . Based on the results of the groundwater investigation, the lateral delineation of the groundwater impacts, specifically dissolved NO_3 , appears to extend to the north, east and west of the former IWWTF. The dissolved NO_3 impacted groundwater appears to be limited to the area in the vicinity of the IWWTF cells (Stantec 2019a).

Monitoring wells at the Site (including the newly installed monitoring wells) will be included in an annual groundwater monitoring program going forward as part of the requirements of Environment Act Licence 2870 RRR. The groundwater monitoring program was outlined in an approved MCC-remediation plan and reporting is ongoing in accordance with the plan. The data from the monitoring program will be used to track changes in the identified groundwater impacts that may be associated with the former IWWTF.

Relining the cell as part of the remediation plan is expected to remove the suspected potential source of the groundwater impacts and monitored natural attenuation (MNA) will be employed to manage the impacted groundwater in accordance with the accepted remediation plan. Therefore, relining the cell as proposed, is expected to provide a positive effect on groundwater quality in the local assessment area (LAA).

The effect of the proposed alteration at the former IWWTF on groundwater is expected to be positive, negligible to low in magnitude, short to medium term in duration, and continuous. Relining of the primary cell will improve the current condition resulting in positive groundwater quality changes at the former IWWTF.

3.1.2 Summary of Mitigation Measures

Proposed mitigation measures incorporated as part of this NOA include those standard practices and procedures identified under the previous 2019 NOAs (Stantec 2019b, c) as well as other general mitigation measures that are typically applied in the course of Project construction and operation.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Environmental Effects and Mitigation
July 29, 2020

Mitigation measures to be employed to avoid or mitigate adverse effects identified in the sections above include the following:

- Dust generation from exposed or disturbed areas will be kept to a minimum; additional dust suppression will be undertaken at the construction site as required (i.e., spraying material stockpiles and work areas with water or other non-toxic measures).
- Disturbed areas will be kept to a minimum and site restoration will occur as soon as practically possible where necessary.
- Construction access will be limited to existing access points only; appropriate construction signage and flagpersons will be utilized for the construction site as required.
- Construction activities will be limited during heavy precipitation/runoff events.
- Surface water drainage patterns will be maintained on-site.
- Silt fences and other erosion protection measures will be installed as necessary during construction for stormwater to avoid erosion and sediments from being transported off-site past site boundary ditching to surface water.
- Exhaust emissions from construction equipment will be reduced through the proper maintenance of vehicles and equipment and restricting vehicle idling.
- Construction waste and loose debris will be gathered and properly disposed of at a regional licensed landfill; recycling of construction waste will be encouraged to the extent possible.
- Construction activity will be limited to working hours in accordance with local municipal by-law provisions.
- Solid waste generated on-site, will be stored in secure bins or storage tanks and removed on a regular basis to licensed/permitted landfills.
- Proper procedures for storage and handling of hazardous materials (i.e., fuels, chemicals) in designated areas will be adhered to.
- An emergency response spill kit will be maintained and emergency response measures for spill clean-up and remediation will be implemented if necessary.
- Contractors engaged in construction activities at the Project site will adhere to federal and provincial health and safety legislation.
- Contractors will adhere to a Project-specific safety plan developed as appropriate.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Environmental Effects and Mitigation
July 29, 2020

- Project site employees will be kept aware of safety requirements and on-site construction works to ensure worker safety.
- The contractor will undertake quality control of all liner and extrusion materials supplied to the job site.
- The contractor will undertake quality control of all aspects of liner installation including attachments to structures and penetrations via a system of inspection and tests to directly monitor quality of work.
- The contractor will employ a quality inspector for the duration of work.
- The liner will be inspected and tested to confirm that it is free of defects, holes, blisters, undispersed raw materials, or contamination by foreign matter.
- The liner will be cleaned by the installer, if required, so that it is free of dust, mud debris or other material which may inhibit thorough examination of the surface.
- Overburden will not be applied to the liner system until it has been inspected by the Contractor.
- Care will be taken not to disturb a groundwater monitoring well located on the south side of the primary cell during construction activities.

3.2 SUMMARY OF RESIDUAL EFFECTS CHARACTERIZATION

A summary of residual environmental effects characterization is found in Table 3-1. Residual effects related to groundwater are characterized.



**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

Environmental Effects and Mitigation
July 29, 2020

Table 3-1 Summary of Residual Environmental Effects

Project Effects	Project Phase	Residual Environmental Effects Characterization						
		Direction	Magnitude	Geographical Extent	Duration	Frequency	Reversibility	Ecological and Socio-economic Context
Groundwater	C/O	P	N-L	LAA	S-M	C	R	D
KEY Project Activity C Construction O Operation Direction P Positive A Adverse N Neutral Magnitude N Negligible L Low M Moderate H High	Geographical Extent PS Project Site LAA Local Assessment Area RAA Regional Assessment Area Duration S Short-term M Medium-term L Long-term Frequency S Single event MI Multiple irregular event MR Multiple regular event C Continuous			Reversibility R Reversible IR Irreversible Ecological/Socio-Economic Context: U Undisturbed D Disturbed N/A Not applicable				



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Accidents and Malfunctions
July 29, 2020

4.0 ACCIDENTS AND MALFUNCTIONS

The effects of accidents and malfunctions for the Project are primarily related to the potential for cell failure and fuel or other chemical spills. During construction, there exists the potential for fires at the Project site involving mechanical equipment and fuels, potential for environmental effects due to fuel and chemical spills and/or leaks from equipment, and accidents that can result in the release of vehicle fluids to the environment (i.e., diesel, gasoline, oils, etc.). Accidents and malfunctions can potentially result in harm to on-site personnel, damage to equipment, the release of contaminants and/or hazardous materials from equipment/vehicles and storage cells due to leaks or improper storage and handling and degradation of the environment and human health and safety. Potential effects resulting from spills occurring in the construction and operation phases are anticipated to be irregular and short-term in duration. Measures to avoid adverse effects are as follows:

- Flammable waste and materials will be removed on a regular basis and disposed of at an appropriate licensed disposal facility.
- Appropriate fire extinguishers will be available on-site during construction and maintained to manufacturer's standards.
- Potentially hazardous materials and chemicals will be stored and handled at dedicated areas and labelled in accordance with applicable regulatory requirements.
- Hazardous materials will be transported in accordance with the *Dangerous Goods Handling and Transportation Act* and used according to product-use instructions.
- Refueling of construction vehicles and equipment will adhere to proper procedures and will use designated refueling areas or will be refueled off-site.
- Emergency spill kits will be maintained on-site and staff will be trained to properly deploy spill kit materials and cleanup spills.
- Inspections of hydraulic and fuel systems on equipment and machinery will be undertaken on a regular basis. Leaks detected will be repaired immediately by trained personnel.
- The cell and new liner will be regularly inspected and maintained to detect and avoid leaks and failures.
- Annual groundwater monitoring at the newly installed monitoring wells will be undertaken at the Site on a go forward basis as part of the requirements of Environment Act License 2870 RRR.
- HyLife Foods continues to maintain policies related to emergency preparedness, workplace hazardous materials information system (WHMIS) and spill response procedures.

During operations at the former IWWTF, regular visual inspection of the relined cell on the property will be undertaken for signs of leakage or other potential signs of wear. To avoid accidents and malfunctions, the proposed alteration will be operated in accordance with regulatory requirements. The implementation of,



**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

Accidents and Malfunctions
July 29, 2020

and adherence to, measures outlined above to mitigate potential effects related to accidents and malfunctions will serve to reduce the likelihood of these events occurring.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

Summary Conclusions
July 29, 2020

5.0 SUMMARY CONCLUSIONS

Stantec has prepared this environmental assessment report on behalf of HyLife in support of the NOA application for the proposed alteration. The remediation of the former IWWTF primary cell, as proposed, is in accordance with the MCC-approved groundwater remediation plan. The NOA application is filed in accordance with Section 14(1) of *The Environment Act* which requires a proponent to notify the Director (for Class 1 and 2 developments) if the proponent intends to alter a licensed development (MSD 2016).

Potential interactions of the Project and the environment were evaluated with likely interactions examined to assess residual effects. Those interactions deemed to potentially generate adverse effects were described and evaluated with the assumption of typical mitigation measures representative of best practices and previous construction methods employed at the Site.

On the basis of the desktop studies undertaken and information available to date as presented in this report, the proposed alteration is expected to create no significant adverse effects to the biophysical and socio-economic environment. It is anticipated that the proposed alteration (the replacement of the primary cell liner at the former IWWTF) will be considered as a minor alteration to the licensed development.



FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT NOTICE OF ALTERATION

References
July 29, 2020

6.0 REFERENCES

6.1 LITERATURE CITED

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**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

References
July 29, 2020

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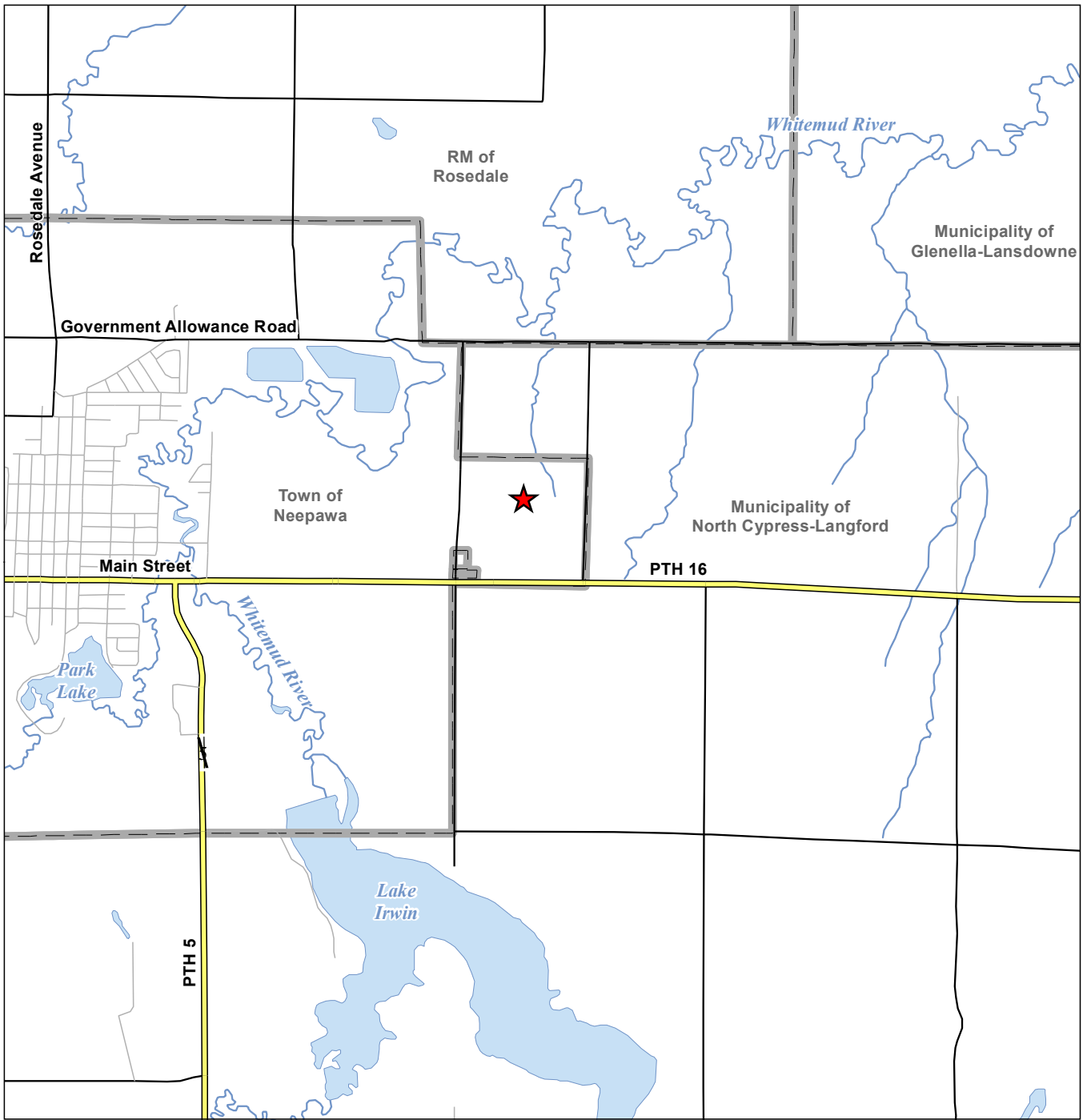


**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

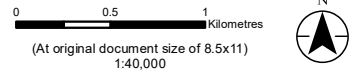
Appendix A Figures
July 29, 2020

Appendix A FIGURES





- Legend**
- Site Location
 - Major Road
 - Minor Road
 - Local Road
 - Watercourse
 - Waterbody
 - Rural Municipality



Project Location
Town of Neepawa,
Manitoba

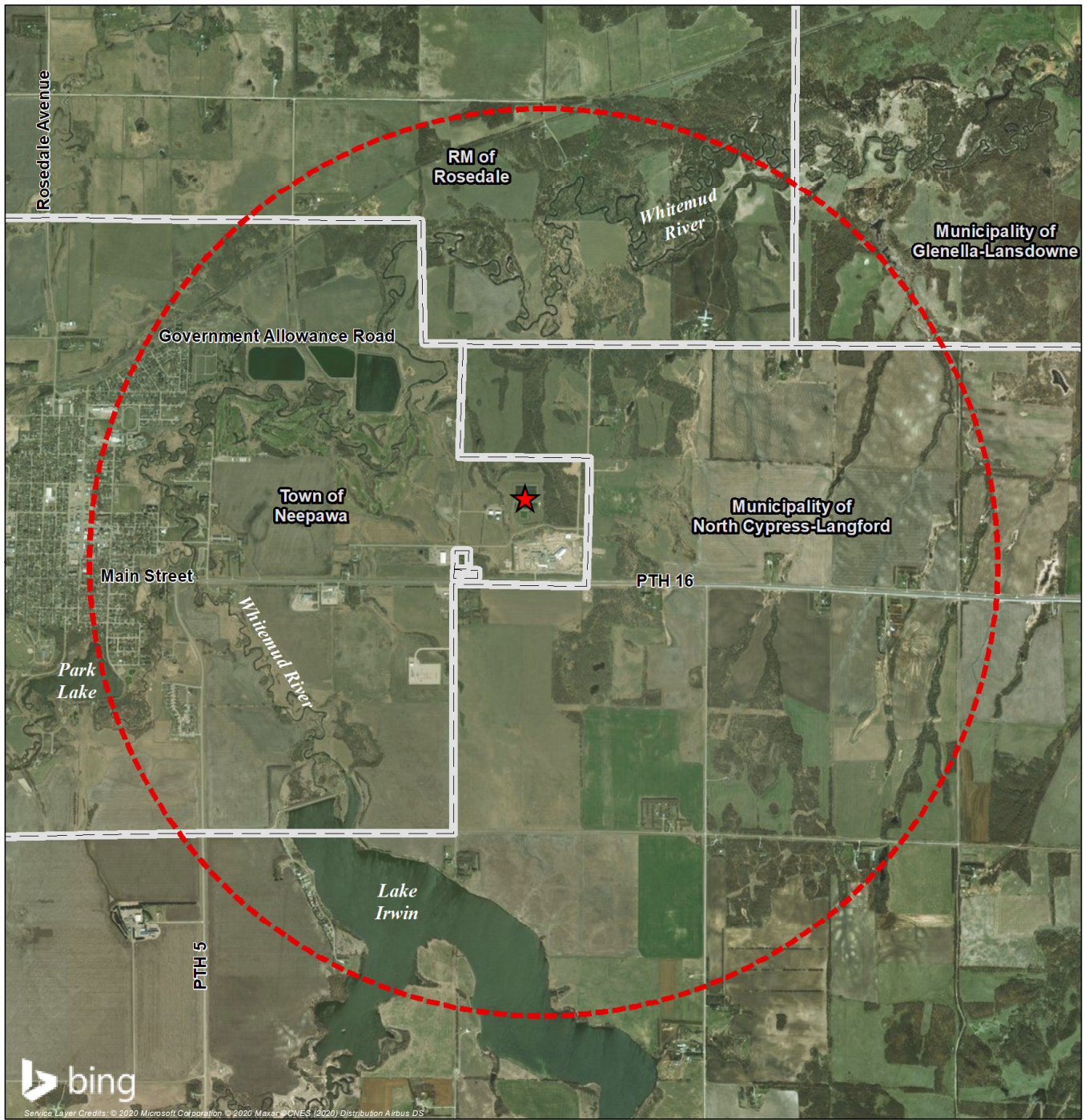
Prepared by JHiebert on 2020-07-10
Reviewed by BKrawchuk on 2020-07-10

Client/Project 111440368
HyLife Foods/Town of Neepawa
Former IWWTF Liner
Notice of Alteration




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1-1a

Title
Location Plan

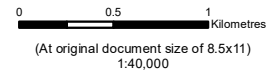
- Notes**
1. Coordinate System: NAD 1983 UTM Zone 14N
 2. Base Data Sources: Government of Manitoba



Legend

-  Site Location
-  Local Assessment Area (3 km Radius)
-  Rural Municipality

Notes
 1. Coordinate System: NAD 1983 UTM Zone 14N
 2. Base Data Sources: Government of Manitoba
 3. Orthoimagery: Microsoft screen shot reprinted with permission from Microsoft Corporation



Project Location Town of Neepawa, Manitoba
 Prepared by JHiebert on 2020-07-10
 Reviewed by BKrawchuk on 2020-07-10

Client/Project 111440368

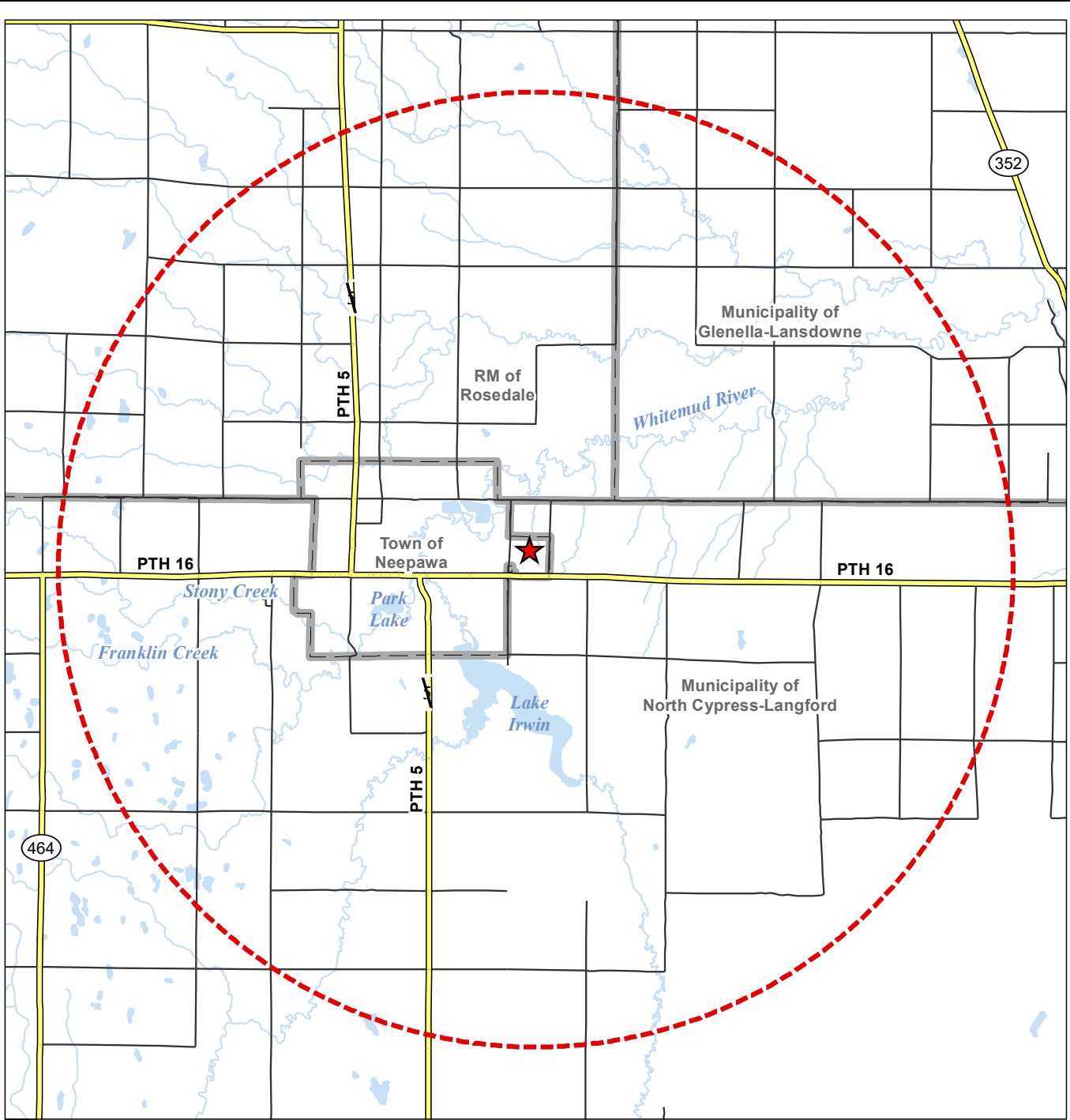
HyLife Foods/Town of Neepawa
 Former IWWTF Liner
 Notice of Alteration

Figure No.








1-1b

Title

**Local Assessment Area
 (3 km Radius)**



Legend

-  Site Location
-  Major Road
-  Minor Road
-  Watercourse
-  Waterbody
-  Regional Assessment Area (10 km Radius)
-  Rural Municipality

Notes
 1. Coordinate System: NAD 1983 UTM Zone 14N
 2. Base Data Sources: Government of Manitoba

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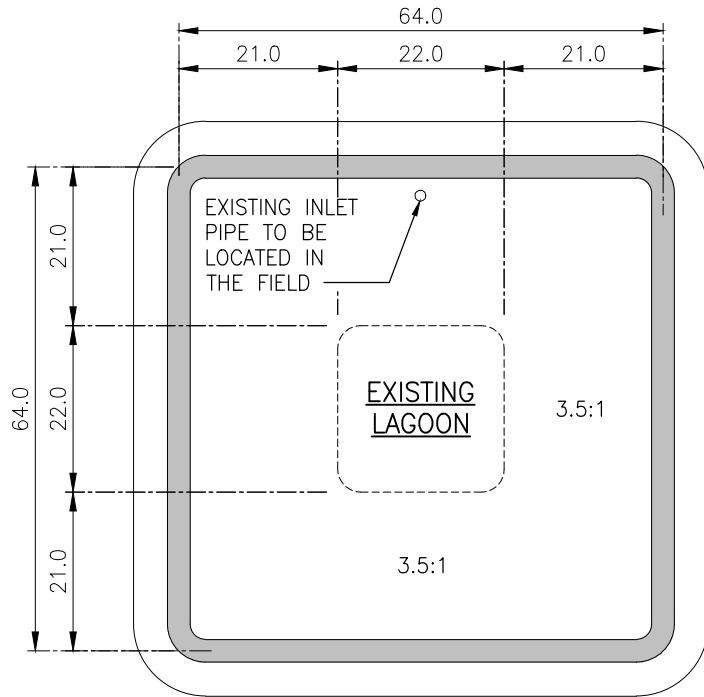


Project Location Town of Neepawa, Manitoba
 Prepared by JHiebert on 2020-07-10
 Reviewed by BKrawchuk on 2020-07-10

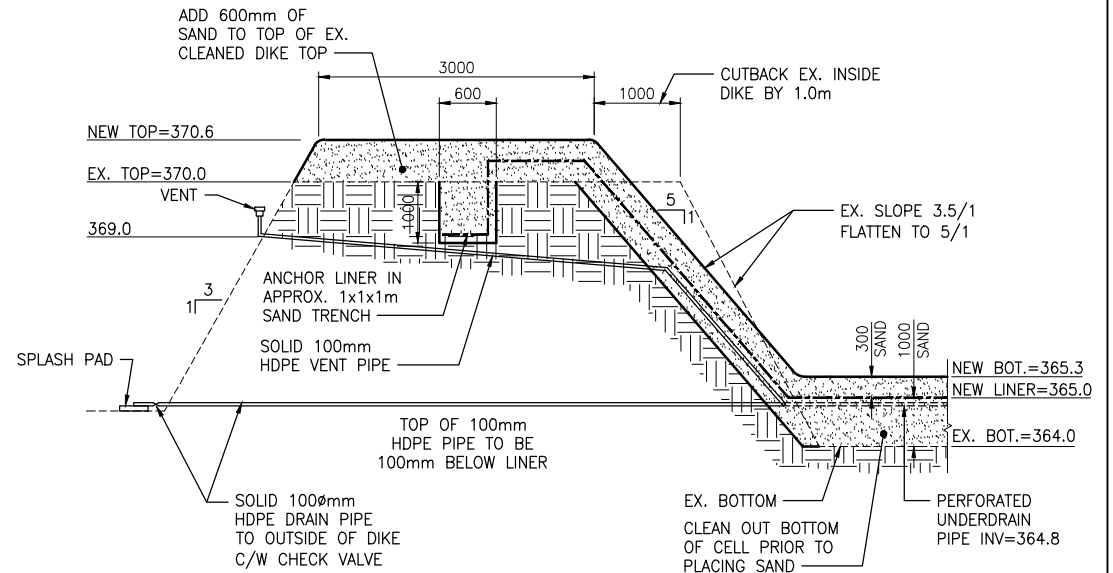
Client/Project HyLife Foods/Town of Neepawa
 Former IWWTF Liner
 Notice of Alteration
 111440368

Figure No.
1-1c
Title
**Regional Assessment Area
 (10 km Radius)**

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2020/06/29 9:55 AM By: Ramnarace, Kesh



EXISTING PLAN VIEW
SCALE 1:1000



TYPICAL LINER CROSS-SECTION
N.T.S.

NOTES:

1. EXISTING CELL 1 DIMENSIONS ARE APPROXIMATE. FINISHED DIKE TOPS TO BE 3.0m MINIMUM WIDTH.
2. REMOVE AND DISPOSE OF ALL DEBRIS FROM EXISTING CELL WORK AREA. RIP RAP TO BE REMOVED AND REPLACED ON FINISHED SLOPES.
3. OWNER TO DRAIN DOWN CELL TO APPROXIMATELY 300mm OF WATER. CONTRACTOR TO REMOVE REMAINING WATER TO PROVIDE SUITABLE SURFACE FOR PLACING SAND BEDDING.
4. CONTRACTOR TO LOCATE INLET PIPE IN THE FIELD AND SEAL IN LINER.
5. CONTRACTOR NOT TO DISTURB MONITORING WELL ON SOUTH SIDE OF CELL.
6. CONCRETE SPLASH PADS TO BE 1.0mx1.0mx150mm REINFORCED CONCRETE.

2020-06-24
111219390



Stantec Consulting Ltd.
Suite 500, 311 Portage Avenue
Winnipeg MB Canada R3B 2B9
Tel. 204.489.5900 Fax. 204.453.9012
www.stantec.com

Legend

Notes

Client/Project

Hylife FOODS LP
LAGOON CELL 1 LINING

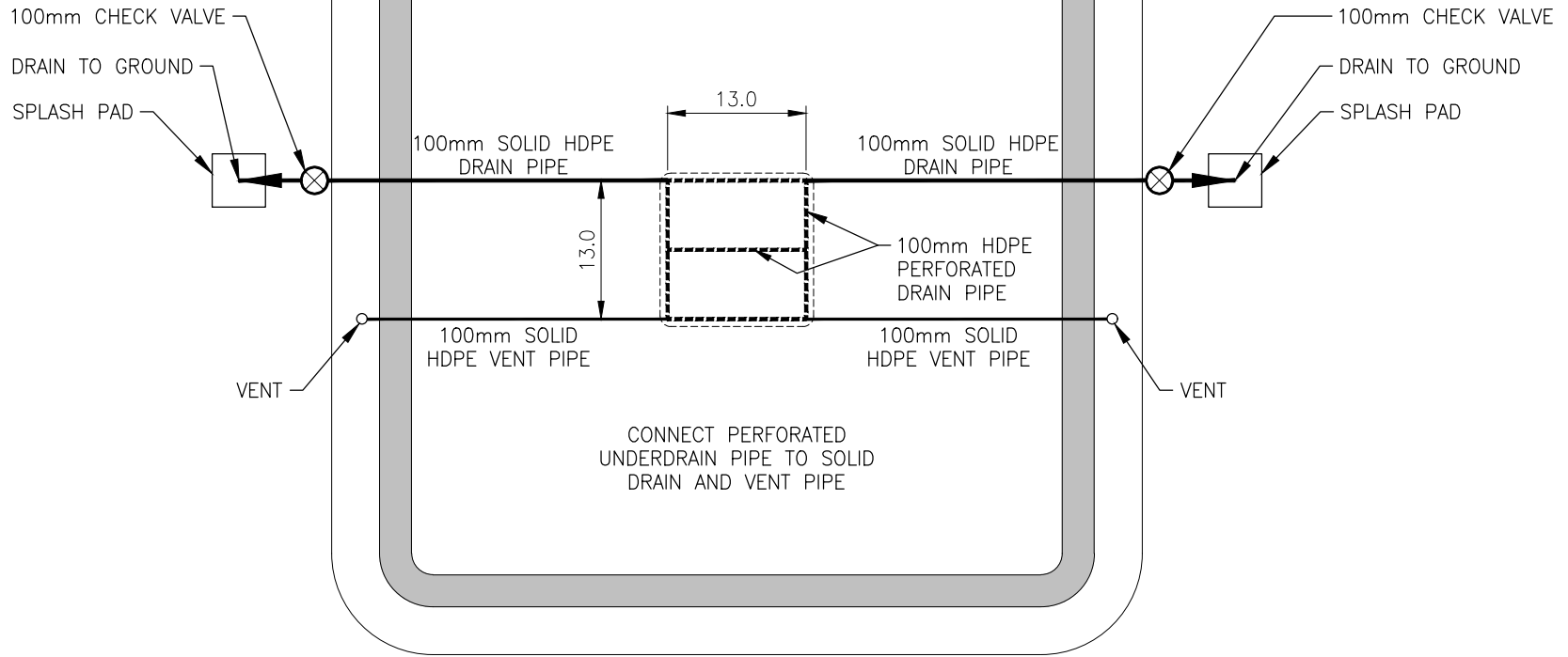
Figure No.

2-1

Title

SITE PLAN AND SECTION

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UNDERDRAIN PLAN
N.T.S.

2020-06-24
111219390



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Legend

Notes

Client/Project
Hylife FOODS LP
LAGOON CELL 1 LINING

Figure No.

2-2

Title

UNDERDRAIN PLAN

**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

Appendix B Licence No. 2870 RRR
July 29, 2020

Appendix B LICENCE NO. 2870 RRR





Sustainable Development

Environmental Stewardship Division
Environmental Approvals Branch
1007 Century Street, Winnipeg, Manitoba R3H 0W4
T 204 945-8321 F 204-945-5229
www.gov.mb.ca/sd

File: 2755.20

July 12, 2019

Sheldon Stott
R3 Innovations Inc.
Box 100
La Broquerie, MB R0A 0W0

Dear Mr. Stott:

Re: R3 Innovations Inc./Town of Neepawa IWWTF –Environment Act Licence No. 2870 RRR

Please find enclosed Environment Act Licence No. 2870 RRR issued to R3 Innovations Inc. and the Town of Neepawa for the operation of the Development being a wastewater collection system and 1570 m³/day hydraulic capacity industrial wastewater treatment facility (IWWTF) located at SW 35-14-15WPM in the Town of Neepawa.

Environment Act Licence No. 2870 RR has been rescinded; the revised licence amends Clause 25 to reflect the annual average of the hydraulic loading.

If you have any questions, please contact Jennifer Winsor, P.Eng. at 204-945-7012.

Yours sincerely,

“original signed by”

Cordella Friesen
Director
The Environment Act

- c. Scott Davies, A/Director, Environmental Compliance and Enforcement
Yvonne Hawryliuk – Environmental Compliance and Enforcement

LICENCE

Licence No./Licence n°	<u>2870 RRR</u>
Issue Date/Date de délivrance	<u>December 18, 2014</u>
Revised / Révisé	<u>May 31, 2019</u> <u>July 12, 2019</u>

In accordance with The Environment Act (C.C.S.M. c. E125)/
Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Sections 11(1) /Conformément au Paragraphes 11(1)

THIS LICENCE IS ISSUED TO:/CETTE LICENCE EST DONNÉE À:

R3 INNOVATIONS INC.
AND
THE TOWN OF NEEPAWA;
“the Licencees”

for the operation of the Development, being a wastewater collection system and 1570 m³/day hydraulic capacity industrial wastewater treatment facility (IWWTF) located at SW 35-14-15WPM in the Town of Neepawa with discharge of treated effluent to the effluent outfall pipeline with final discharge to the Whitemud River in accordance with the Proposal dated June 12, 2013 and subsequent information provided on November 25, 2013 and a May 3, 2019 notice of alteration and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

“**accredited laboratory**” means an analytical facility accredited by the Standard Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Conservation and Water Stewardship to be equivalent to the SCC, or be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the Director;

“**acute lethality**” means a toxic effect resulting in death produced in an organism by a substance or mixture of substances within a short exposure period (usually 96 hours or less);

“**affected area**” means a geographical area, excluding the property of the Development;

“**approved**” means approved by the Director or assigned Environment Officer in writing;

“**biosolids**” means accumulated organic solids, resulting from wastewater treatment processes. that have received adequate treatment to permit the material to be recycled;

“**calibrate**” means to determine, check, or rectify the graduation of any instrument giving quantitative measurement;

“**composite sample**” means a quantity of undiluted effluent composed of a minimum of 24 sequential series of discrete equal volumes of effluent collected at a rate proportionate to the flow rate of the effluent over a period of 24 consecutive hours;

“**day**” or “**daily**” means any period of 24 consecutive hours;

“**Director**” means an employee so designated pursuant to The Environment Act;

“**effluent**” means treated wastewater flowing or pumped out of the wastewater treatment facility;

“**Environmental Management System (EMS)**” means the part of the overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes, and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy;

“**Environment Officer**” means an employee so appointed pursuant to The Environment Act;

“**Escherichia coli (*E.coli*)**” means the species of bacteria in the fecal coliform group found in large numbers in the gastrointestinal tract and feces of warm-blooded animals and man, whose presence is considered indicative of fresh fecal contamination, and is used as an indicator organism for the presence of less easily detected pathogenic bacteria;

“**fecal coliform**” means aerobic and facultative, Gram-negative, nonspore-forming, rod-shaped bacteria capable of growth at 44.5° C, and associated with fecal matter of warm blooded animals;

“**final discharge point**” means the effluent monitoring location past the UV disinfection facility of the wastewater treatment plant, or the actual end-of-pipe outfall location for the effluent following the wastewater treatment plant at or near the banks of the Whitemud River, unless otherwise re-designated in writing by the Director;

“**five-day biochemical oxygen demand (BOD₅)**” means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within five days at a temperature of 20°C;

“five-day carbonaceous biochemical oxygen demand (CBOD₅)” means that part of the oxygen demand usually associated with biochemical oxidation of carbonaceous organic matter within five days at a temperature of 20°C, excluding the oxygen demand usually associated with the biochemical oxidation of nitrogenous organic matter;

“flow proportional composite sample” means a combination of not less than ten individual samples of equal volumes of wastewater taken at equal increments of wastewater flow over a specified period of time;

“grab sample” means a quantity of wastewater taken at a given place and time;

“hog processing facility” means the HyLife Foods LP hog processing facility operating under Environment Act Licence No. 1102 RRR or subsequent revised licence and all the supporting facilities located on that same property;

“Industrial Services Agreement” means a signed and legally binding agreement, arrived at between the Licencees and HyLife Foods LP which outlines clear limits respecting the maximum daily and maximum weekly flow rates, as well as maximum daily and maximum weekly loading limits on such physical, chemical and biological parameters as may be requested by the Licencees or HyLife Foods LP;

“influent” means all the untreated hog processing wastewater and sanitary sewage from the hog processing facility and the associated truck wash facility, being directed into the wet well prior to the fine screening stage;

“IWWTF” means the industrial wastewater treatment facility which includes the wastewater collection system, the wastewater treatment plant and the wastewater treatment lagoons;

“kg/d” means kilograms per day;

“mg/L” means milligrams per litre;

“MPN index” means the most probable number of coliform organisms in a given volume of wastewater or effluent which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

“noise nuisance” means an unwanted sound, in an affected area, which is annoying, troublesome, or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to members of the public;

if the unwanted sound

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses a), b) or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b) or c) and the Director is of the opinion that if the unwanted sound had occurred in a more densely

populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household;

“odour nuisance” means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to members of the public;

if the odour, smell or aroma

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses a), b) or c) who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b) or c) and the Director is of the opinion that if the odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household;

“Operator” means a person certified to operate the IWWTF and employed by the Licencees to manage the functional day-to-day operation of the IWWTF within the constraints of this Licence;

“pollutant” means a pollutant as defined in The Environment Act;

“process wastewater” means all wastewater from the hog processing facility, including sanitary sewage and wastewater from the associated truck wash facility;

“record drawings” means engineering drawings complete with all dimensions which indicate all features of the Development as it has actually been built;

“sludge” means accumulated solid material containing large amounts of entrained water, which has separated from wastewater during processing;

“Standard Methods for the Examination of Water and Wastewater” means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Waterworks Association and the Water Environment Federation;

“thirty-day rolling average” means the arithmetic average of any daily reported data and the preceding 29 consecutive days of reported data;

“undiluted” means free of extraneous sources of water which could feasibly be prevented from mixing with effluent streams prior to their discharge at their designated final discharge point(s), and not having water added for the purposes of meeting any effluent quality limits specified in this Licence;

“UV disinfection” means a disinfection process for treating wastewater using ultraviolet radiation;

"**UV germicidal dose**" means the unit of intensity of ultra violet light that is required to kill bacteria and viruses present in the wastewater effluent;

"**wastewater**" means the spent or used water of a community or industry which contains dissolved and suspended matter;

"**wastewater collection system**" means the sewer and pumping system used for the collection and conveyance of domestic, commercial and industrial wastewater;

"**wastewater treatment lagoon**" means the component of this development which consists of an impoundment into which wastewater is discharged for treatment and storage;

"**wastewater treatment plant**" means the central facility of wastewater treatment facilities which contains all treatment processes exclusive of the collection system;

"**week**" or "**weekly**" means any period of 7 consecutive days; and

"**WHMIS**" means Workplace Hazardous Materials Information System.

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencees in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

Retain Copy of Licence

1. The Licencee shall at all times maintain a copy of this licence at the Development or at the premises from which the Development's operations are managed.

Future Sampling

2. In addition to any of the limits, terms and conditions specified in this Licence, the Licencees shall, upon the request of the Director:
 - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated with the release of any pollutant(s) from the Development;
 - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
 - d) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used,

bioassay data, flow rate measurements and such other information as may from time to time be requested.

3. The Licencees shall, unless otherwise specified in this Licence:
 - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current edition of Standard Methods for the Examination of Water and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the Director;
 - b) carry out all sampling of, and preservation and analyses on, soil and air samples in accordance with methodologies approved by the Director;
 - c) have all analytical determinations undertaken by an accredited laboratory; and
 - d) report the results to the Director within 60 days of the samples being taken.
4. The Licencees shall actively participate in any future watershed-based management study, plan and/or nutrient reduction program, approved by the Director, for the Whitemud River and/or associated waterways and watersheds.

Reporting Format

5. The Licencees shall submit all information required to be provided to the Director or Environment Officer under this Licence, in writing, in such form (including number of copies) and of such content as may be required by the Director or Environment Officer, and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.

Equipment Breakdown

6. The Licencees shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
7. The Licencees shall, following the reporting of an event pursuant to Clause 6,
 - a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the Director; and
 - d) submit a report to the Director about the causes of breakdown and measures taken, within one week of the repairs being done.

Safety and Security

8. The Licencees shall continually maintain an up-to-date inventory of any process and cleaning chemicals used and/or stored on-site that would be captured by any applicable federal/provincial WHMIS regulations and protocols, and make this information and applicable MSDS sheets available to an Environment Officer upon request.

9. The Licencees shall prepare, within 90 days of the date of issuance of this Licence, and maintain an emergency response contingency plan in accordance with the Canadian Centre for Occupational Health and Safety “Emergency Response Planning Guide” or other emergency planning guidelines acceptable to the Director.
10. The Licencees shall implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
11. The Licencees shall implement and continually maintain in current status, an Environmental Management System (EMS) for the Development which is acceptable to the Director.
12. The Licencees shall:
 - a) install or utilize existing security fencing, acceptable to the Director, to enclose the wastewater treatment plants or components thereof, that are not enclosed in a building with a security system acceptable to the Director; and
 - b) maintain the security system in a manner acceptable to the Director.

Certification

13. The Licencees shall obtain and maintain classification of the Development pursuant to Manitoba Regulation 77/2003 respecting Water and Wastewater Facility Operators or any future amendment thereof and maintain compliance with all requirements of the regulation including, but not limited to, the preparation and maintenance of a Table of Organization, Emergency Response Plan and Standard Operating Procedures.
14. The Licencees shall carry out the operation of the Development with individuals properly certified to do so pursuant to Manitoba Regulation 77/2003 respecting Water and Wastewater Facility Operators or any future amendment thereof.

Industrial Services Agreement

15. The Licencees shall:
 - a) prepare and execute a current comprehensive and enforceable Industrial Services Agreement, which is acceptable to the Director, for the purposes of defining maximum daily and maximum weekly influent limits respecting volume and pollutant loading rates which would protect the operational integrity of the IWWTF in terms of the design capability and/or in consideration of the actual performance of the IWWTF relative to the effluent quality limits as specified in this Licence, or any revision thereof;
 - b) provide the Director with a copy of the Industrial Services Agreement upon being signed by all parties; and
 - c) provide the Director with a copy of any future revised Industrial Services Agreement.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Construction

16. The Licencees shall notify the assigned Environment Officer not less than two weeks prior to beginning construction at the Development. The notification shall include the intended starting date of construction and the name of the contractor and contact person responsible for the construction.
17. The Licencees shall obtain all necessary federal, provincial and/or municipal licences, authorizations, permits and/or approvals for construction of relevant components of the Development prior to commencement of construction.
18. The Licencees shall dispose of non-reusable construction debris from the Development at a waste disposal ground operating under the authority of a permit issued pursuant to Manitoba Regulation 150/91 respecting Waste Disposal Grounds, or any future amendment thereof, or a Licence issued pursuant to The Environment Act.
19. The Licencees shall locate fuel storage and equipment servicing areas established for the construction and operation of the Development a minimum distance of 100 metres from any waterbody, and shall comply with the requirements of Manitoba Regulation 188/2001 respecting Storage and Handling of Petroleum Products and Allied Products or any future amendment thereof.
20. The Licencees shall, during construction of the Development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering the discharge route and associated watercourses, and have an emergency spill kit for in-water use available on site during construction.
21. The Licencees shall not permit any pollutants to be directed into, or transported by, any surface drainage route leading off the property of the Development.
22. The Licencees shall pressure test the integrity of the connections of any new underground piping of the Development, which is intended to transport wastewater under pressure, before such pipe connections are backfilled with earth and make repairs as required.
23. The Licencees shall:
 - a) clearly mark all those existing groundwater monitoring wells located on the property of the Development which have the potential to be disturbed by any construction activity involving the expansion and modification of the Development; and
 - b) decommission any existing groundwater monitoring well(s) which are planned to be terminated or relocated (in the course of the construction activities) in a manner consistent with any applicable guidelines or requirements administered by the Manitoba Conservation and Water Stewardship.

Respecting Operation of the Development

24. The Licencees shall not accept wastewater, liquid sludge or manure into the IWWTF from any source other than the HyLife Foods hog processing facility and truck wash facility, except for seed as may be required by the IWWTF upon the start-up of the IWWTF modifications or to recover from a treatment process upset.
25. The Licencees shall operate and maintain the IWWTF in such a manner that, when measured immediately following the flow attenuation tank:
 - a) the hydraulic loading does not exceed 1,570 cubic metres over any 24-hour period based on an annual average; and
 - b) the organic loading does not exceed 6,023 kilograms of five-day biochemical oxygen demand over any 24-hour period.
26. The Licencees shall:
 - a) stage the ramp-up of the operation of the IWWTF in accordance with the written instructions of the Operator of the IWWTF;
 - b) limit the wastewater being directed into the IWWTF to only that wastewater which is generated at the HyLife Foods hog processing plant and truck wash facility while operating at a hog processing rate not exceeding 40,000 hogs per week averaged over any 12 month period; and
 - c) continually monitor and manage the quality and quantity of the raw wastewater streams from the HyLife Foods hog processing facility and truck wash facility relative to the design limitations of the IWWTF and consistent with maintaining ongoing compliance with the limits, terms and conditions set out in this Licence.
27. The Operator of the IWWTF shall:
 - a) provide written instructions to HyLife Foods, when necessary, with respect to managing the quality and quantity of any wastewater streams being directed from the hog processing facility and the truck wash facility to the IWWTF, clearly indicating the necessity for the instruction(s) and any critical timing associated with executing the instruction(s); and
 - b) copy the Director on any written authorizations or instruction provided to HyLife Foods concerning the commissioning of the altered IWWTF and the ongoing management of the quality and quantity of any influent wastewater streams being directed into the wet well at the front of the IWWTF.
28. The Licencees shall install and maintain adequate instrumentation to provide constant monitoring of the UV process to ensure compliance with the disinfection requirements. Such instrumentation shall include but not be limited to the following:
 - a) a UV sensor to monitor lamp intensity;
 - b) an appropriate alarm;
 - c) a lamp monitoring system to identify the location of individual lamp failures;
 - d) an hour meter which cannot be reset to display actual hours of UV lamp operation; and
 - e) protective circuits for overcurrent and ground current leakage detection.
29. The Licencees shall utilize UV lamps that have a rated output of at least 254 nanometres (nm) capable of delivering a UV germicidal dose in excess of 30,000 microwatt seconds/sq cm.

30. The Licencees shall operate and maintain the UV units to give a germicidal dose of 80% or more of the design germicidal dose, at the end of the lamp life.
31. The Licencee shall submit, to the Director for approval within 90 days of issuance of this Licence, an operational plan for the existing wastewater treatment lagoon, including plans to seal and/or decommission the discharge outlet from the facility.
32. The Licencees shall maintain a 1.0 metre freeboard at the existing wastewater treatment lagoon cells at all times.
33. The Licencees shall:
 - a) transfer wastewater to the existing wastewater treatment lagoon at the Development, only under exceptional circumstances, for temporary wastewater storage purposes only;
 - b) transfer the stored wastewater from the existing wastewater treatment lagoon to the wastewater treatment plant for treatment and discharge only through the final discharge point; and
 - c) notify the Environment Officer on each occasion when the transfer of wastewater to the existing wastewater treatment lagoon occurs and keep a record of each transfer.

Respecting Effluent Releases from the Development

34. The Licencees shall release effluent from the Development only through the final discharge point which leads to the Whitemud River.
35. The Licencees shall not release any effluent from the Development if the quality of the effluent is such that:
 - a) the organic content in the effluent, as indicated by the five-day carbonaceous biochemical oxygen demand, is in excess of 25 mg/L, as determined from any composite sample of the effluent;
 - b) the total suspended solids content in the effluent, is in excess of 25 mg/L, as determined from any composite sample of the effluent;
 - c) the fecal coliform content in the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample, as determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week;
 - d) the E. coli content in the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample, as determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week;
 - e) the concentration of total nitrogen in the effluent on any day is in excess of 15.0 milligrams per litre, as determined by the 30-day rolling average;
 - f) the concentration of total phosphorus in the effluent on any day is in excess of 1.0 milligrams per litre, as determined by the 30-day rolling average; or
 - g) the total ammonia is in excess of the concentration specified in Schedule 1 of this Licence, as determined by the pH of the effluent.
36. The Licencees shall not, on any day, release a quality of effluent from the Development which:
 - a) causes, or contributes to, the mixing zone for the effluent in the Whitemud River being acutely lethal to aquatic life passing through the mixing zone; or

- b) which can be demonstrated to be acutely lethal to fish within the mixing zone for the effluent in the Whitemud River using a 96-hour static acute lethality test which results in mortality to more than 50 percent of the test fish exposed to 100 percent strength effluent, with the test carried out in accordance with the protocol outlined in Environment Canada's "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout: EPS/1/RM/13 Second Edition – December 2000", or any future amendment thereof, or by another toxicity testing method approved by the Director.

37. The Licencees shall not direct wastewater to the Town of Neepawa municipal wastewater treatment lagoon.

Respecting Groundwater Protection

38. The Licencees shall:

- a) develop and submit to the Director, for approval, a Groundwater Monitoring Program to encompass all groundwater zones that could potentially be impacted at the site of the Development by losses of untreated or partially treated wastewater or any spilled liquid chemicals or petroleum fuel; and
- b) submit an annual report to the Director each year on the findings of the approved Groundwater Monitoring Program.

39. The Licencees shall, upon learning that the approved Groundwater Monitoring Program has identified evidence of probable or certain groundwater contamination;

- a) file an action plan with the Director, as soon as possible, to identify and isolate the source(s) of the groundwater contamination; and
- b) implement remediation measures, to the satisfaction of the Director, and to the extent necessary to restore the impacted groundwater.

40. The Licencees shall, upon the suspicion or detection of any leaking or ruptured wastewater collection pipe or forcemain, immediately undertake an investigation, and upon confirmation of a leak or rupture, terminate or otherwise re-route all inputs to the pipe or forcemain until the necessary repair has been completed.

Respecting Air Emissions

41. The Licencees shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.

42. The Licencees shall not cause or permit a noise nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.

43. The Licencees shall prepare and maintain and make available to an Environment Officer upon request:
- a) an updated greenhouse gas inventory respecting the Development, by addressing carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride emissions; and
 - b) a greenhouse gas management plan for the Development, including reduction strategies and targets.

Respecting Solid Wastes

44. The Licencees shall not undertake any on-site burning of solid waste.
45. The Licencees shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
46. The Licencees shall not deposit solid waste into the environment except into a waste disposal ground operating under the authority of an Environment Act Licence or a permit issued pursuant to Manitoba Regulation 150/91 or any future amendment thereof, where the operator of that facility has agreed to accept the solid waste.

Respecting the Management of Sludge and Biosolids

47. The Licencees shall transport all of the dewatered sludge and biosolids from the development:
- a) to an approved facility operating under a valid Environment Act Licence or permit; and
 - b) in containers in such a manner to prevent the loss of sludge and biosolids or entrained fluids to the satisfaction of an Environment Officer.
48. The Licencees shall return all centrate resulting from the dewatering of the sludge and biosolids by centrifuges to the flow attenuation tank for treatment.

Respecting the Effluent Monitoring Station

49. The Licencees shall:
- a) construct and make available for use by an Environment Officer, at locations acceptable to the Director, secured and heated monitoring stations with direct access to:
 - i) the IWWTF wastewater influent pipelines; and
 - ii) the IWWTF wastewater effluent pipeline; and
 - b) make the monitoring stations accessible to an Environment Officer at all times;
 - c) install and maintain a continuous flow measuring devices, equipped with an interface compatible with departmentally owned ISCO sampler, at the monitoring stations or at a location acceptable to the Director which is capable of measuring the volume of effluent with an accuracy of ± 2 percent;
 - d) have the flow measuring device re-calibrated every two years or on the request of an Environment Officer;
 - e) submit to the Director a certificate of calibration, signed by a person qualified to calibrate the flow measuring device, for each flow measuring device within two weeks of the completion of

- each calibration, identifying the plus or minus percent error associated with each calibrated flow measuring device; and
- f) equip the monitoring stations with a flow-proportional sampling device equipped to function with the flow measuring device and have the sampling device available on request for use by an Environment Officer.

Respecting Monitoring, Record Keeping and Reporting of Effluent Releases

50. The Licencees shall:

- a) continuously measure and record the daily and total monthly volume (cubic metres) of effluent released from the final discharge point of the Development to an accuracy within ± 2 percent;
- b) once every week, on a full production day, collect a composite sample of the effluent at the final discharge point of the Development, and analyze it for:
- i) pH;
 - ii) temperature (field);
 - iii) suspended solids (mg/L);
 - iv) five-day carbonaceous biochemical oxygen demand (mg/L); and
 - v) ammonia nitrogen (expressed as mg/L of N); and
- c) once each day collect a composite sample of the effluent from the Development and analyze it for:
- i) total nitrogen (as N); and
 - ii) total phosphorus (as P);
- d) once each day at equal time intervals for a minimum of three (3) consecutive days per week, collect a grab sample of the effluent from the final discharge point of the Development and analyze it for:
- i) fecal coliform (expressed as MPN per 100 millilitres of sample); and
 - ii) E. coli (expressed as MPN per 100 millilitres of sample); and
- determine and record the monthly geometric mean for each of the fecal coliform and the E. coli counts based on all the data collected during each month for each coliform type;
- e) determine and record the loadings of:
- i) ammonia nitrogen (as kg/d of N);
 - ii) total nitrogen (as kg/d of N); and
 - iii) total phosphorus (as kg/d of P);
- released to the Whitemud River on each sampling date; and
- f) once every six months, collect a grab sample of the effluent at the final discharge point and have the sample analyzed by means of appropriate analytical methodologies to identify and quantify the presence of:
- i) Cryptosporidium;
 - ii) Giardia;
 - iii) heavy metals;
 - iv) organochlorines;
 - v) active pharmaceutical ingredients (particularly suspected endocrine disrupting compounds) which may be associated with pork processing operations; and
 - vi) such other parameter(s) as may be requested by the Director;
- until or unless otherwise specified by the Director.

51. The Licencees shall:
- a) take two flow proportional composite samples of effluent from the wastewater treatment plant over a 24 hour period every three months each year with a minimum separation time of 90 days between samples;
 - b) have one bioassay sample of the effluent analyzed at 100 percent concentration for acute lethality in accordance with the protocol outlined in Environment Canada's "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout: EPS 1/RM/13 Second Edition – December 2000", or any future amendment thereof; and
 - c) report the results to the Director within 30 days of the end of the month during which the samples were taken.
52. The Licencees shall submit monthly reports on applicable analytical values and information determined and recorded pursuant to Clauses 50 and 51 of this Licence, to the Director, in writing and in an electronic format acceptable to the Director, no later than 30 days after the end of the month during which the information was collected or compiled.
53. The Licencees shall during each year maintain the following records and retain them for a minimum period of five calendar years:
- a) wastewater sample dates;
 - b) original copies of laboratory analytical results of the sampled wastewater;
 - c) a summary of laboratory analytical results;
 - d) monthly effluent discharge volumes;
 - e) maintenance and repairs; and
 - f) a summary of any sanitary sewer overflows / combined sewer overflows.
54. The Licencees shall submit an annual report to the Environment Officer by February 28 of the following year including all records required by Clause 33 and Clause 53 of this Licence.

Record Drawings

55. The Licencees shall:
- a) prepare updated "record drawings" for the Development and shall label the drawings "Record Drawings"; and
 - b) provide to the Director, within six months from the date of this Environment Act Licence, two electronic copies of the "record drawings".

REVIEW OR REVOCATION

- A. This Licence replaces Environment Act Licence No. 2870 RR which is hereby rescinded.
- B. If, in the opinion of the Director, the Licencees have failed or are failing to comply with any of the specifications, limits, terms or conditions set out herein, the Director may, temporarily or permanently, revoke this Licence.

- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.

“original signed by”

Cordella Friesen
Director
The Environment Act

File: 2755.20

Schedule 1 to Environment Act Licence No. 2870 RR

Maximum Total Ammonia - Acute Toxicity Limits pursuant to Clause 35 (g)

Effluent pH	Total Ammonia (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	26.21
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

**FORMER SPRINGHILL FARMS IWWTF PRIMARY CELL LINER REPLACEMENT
NOTICE OF ALTERATION**

Appendix C Certificate of Title
July 29, 2020

Appendix C CERTIFICATE OF TITLE



STATUS OF TITLE

Title Number **2065009/5**
Title Status **Accepted**
Client File **Bill Krawchuk - 111440368**



1. REGISTERED OWNERS, TENANCY AND LAND DESCRIPTION

TOWN OF NEEPAWA

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON IN THE FOLLOWING DESCRIBED LAND:

AT NEEPAWA AND BEING:
LOT 1 PLAN 23208 NLTO
IN SW 1/4 35-14-15 WPM

The land in this title is, unless the contrary is expressly declared, deemed to be subject to the reservations and restrictions set out in section 58 of *The Real Property Act*.

2. ACTIVE INSTRUMENTS

Instrument Type: **Caveat**
Registration Number: **30550/5**
Instrument Status: **Accepted**

Registration Date: 1952-08-01
From/By: CROWN TRUST COMPANY
To:

Amount:
Notes: No notes
Description: No description

Instrument Type: **Caveat**
Registration Number: **85-3172/5**
Instrument Status: **Accepted**

Registration Date: 1985-05-27
From/By: MANITOBA TELEPHONE SYSTEM
To:

Amount:
Notes: AFF: PART
Description: No description

Instrument Type: **Caveat**
Registration Number: **86-1191/5**
Instrument Status: **Accepted**

Registration Date: 1986-03-21
From/By: THE TOWN OF NEEPAWA
To:

Amount:
Notes: No notes
Description: No description

Instrument Type: **Caveat**
Registration Number: **86-2833/5**
Instrument Status: **Accepted**

Registration Date: 1986-06-24
From/By: THE RM OF LANGFORD
To:

Amount:
Notes: No notes
Description: No description

Instrument Type: **Caveat**
Registration Number: **86-5122/5**
Instrument Status: **Accepted**

Registration Date: 1986-11-14
From/By: MANITOBA HYDRO-ELECTRIC BOARD
To:

Amount:
Notes: No notes
Description: No description

3. ADDRESSES FOR SERVICE

TOWN OF NEEPAWA
BOX 339
NEEPAWA MB
R0J 1H0

4. TITLE NOTES

No title notes

5. LAND TITLES DISTRICT

Neepawa

6. DUPLICATE TITLE INFORMATION

Duplicate Produced for: HOLD FOR PROD OF DUPL CT NO(S)
215354

7. FROM TITLE NUMBERS

215354/5 All

8. REAL PROPERTY APPLICATION / CROWN GRANT NUMBERS

No real property application or grant information

9. ORIGINATING INSTRUMENTS

Instrument Type: **Request To Issue Title - Internal**
Registration Number: **1042371/5**

Registration Date: 2005-01-19
From/By: THE TOWN OF NEEPAWA
To:
Amount:

10. LAND INDEX

Lot 1 Plan 23208
IN SW 35-14-15W

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE
SYSTEM OF TITLE NUMBER 2065009/5