

**HyLife Foods LP Processing  
Plant Notice of Alteration**

FINAL REPORT



Prepared for:  
HyLife Foods Ltd. and R3  
Innovations Inc.

Prepared by:  
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111440368

February 20, 2018



## Sign-off Sheet

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Prepared by

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**Bill Krawchuk, M.N.R.M., MCIP, RPP**

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**Stephen Biswanger, P.Eng.**





February 5, 2018

Attention: Ms. Tracy Braun, M.Sc.

Director, Environmental Approvals Branch  
Manitoba Sustainable Development  
160-123 Main Street  
Winnipeg, MB R3C 1A5

Dear Ms. Braun,

Reference: NOA Request – Licence 1102RR HyLife Foods, Neepawa, Manitoba

In accordance with Section 14(1) of *The Environment Act*, HyLife Foods LP, by way of this letter and supporting information, provides a request to the director to approve a proposed alteration to the HyLife Foods Pork Processing Plant licence for its operations in Neepawa, Manitoba. The proposed works at the HyLife Foods facility are complemented by works proposed (under separate cover) at the related R3 Innovations Industrial Wastewater Treatment Facility (IWWTF) that, jointly, will address treatment process restrictions and facilitate the ability of both operations to operate at their currently licensed levels.

HyLife Foods is proposing to make alterations to the pre-treatment system at the pork processing plant to better accommodate the forecasted short duration/high flow surge of wastewater generated by clean-up and sanitation shifts and convey flows to the R3 Innovations IWWTF. The proposed alterations include upgrading some existing pumps, addition of a rotary drum screen and screened wastewater lift station, and the addition of a new attenuation tank and controls building. The works will be located on the existing HyLife Foods property. There is no change proposed to the 37,500 hogs/week pork processing capacity at the plant, and the changes will not result in exceeding the IWWTF's effluent or discharge criteria.

As indicated in the attached report, the proposed alterations at the processing plant, essentially improving the ability of the pre-treatment system to accommodate high flow events while utilizing the existing conveyance infrastructure, and the associated operational and potential environmental effects are considered to be minor. Accordingly, a \$500 application fee accompanies four hard copies and one electronic copy of the submission in accordance with the guidance in the Information Bulletin – Alterations to Developments with Environment Act Licences (<http://www.gov.mb.ca/conservation/eal/publs/alteration.guidelines.pdf>).

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

Regards,

Denis Vielfaure, COO



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## Executive Summary

HyLife Foods LP operates the Hylife pork processing plant in the Town of Neepawa, Manitoba, and has plans to make alterations to the pre-treatment infrastructure at the pork processing plant and at the R3 Innovations Industrial Wastewater Treatment Facility (IWWTF). As required under Manitoba's *The Environment Act*, an application for Notice of Alteration (NOA) to the existing plant licence (1102RR) is submitted with supporting information to Manitoba Sustainable Development (MSD) for consideration. An NOA request for the alterations at the R3 Innovations facility is provided under separate cover.

The HyLife Foods pork processing plant is located in the southern part of SW35-14-15W (Project Development Site) in the Town of Neepawa on property that is currently owned by HyLife Foods. The processing facility has been in operation at this location since 1986, previously operating as Springhill Farms. Licence No. 1102RR is the current licence for the hog processing plant, dated March 24, 2017. The plant is located on a site zoned "MH – Manufacturing Heavy" under the Town of Neepawa Zoning By-law No. 2650.

The proposed alterations to the pre-treatment works at the pork processing plant will better accommodate the forecasted short duration/high flow surge of wastewater generated by clean-up and sanitation shifts and better accommodate and convey the flows to the R3 Innovations IWWTF with minimal disruption to operations at both facilities. While no changes in effluent criteria or discharge are proposed for the IWWTF, a parallel submission is presented under separate cover for required process alterations at the IWWTF to continue to meet its licence requirements. Proposed alterations at the Hylife pork processing plant include the following:

- Installation of larger replacement pumps in the cut floor wastewater lift station.
- Addition of a rotary drum screen and screened wastewater lift station.
- Addition of a new pre-attenuation controls building and a flow pre-attenuation tank.

This NOA request has been prepared by Stantec Consulting Ltd. (Stantec) on behalf of HyLife Foods in general accordance with MSD's Information Bulletin, "*Alterations to Development with Environment Act Licences*" and in accordance with Section 14(1) of *The Environment Act* (MSD 2016). This report describes relevant existing plant operations, proposed alterations and potential environmental effects, and proposed mitigation measures associated with the alterations.

No increase in pork processing capacity at the processing plant is proposed. Potential Project environmental effects are limited and are considered fairly routine activities (i.e., related to construction of small lift stations, installation of pre-treatment equipment, and construction noise,

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etc. in an industrial environment). Operational effects are associated with an increase in wastewater flow as a result of pre-treatment changes made at the processing plant.

On the basis of the information as presented in this report, the proposed alterations are not expected to create significant adverse environmental effects.

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## 1.0 INTRODUCTION

### 1.1 PROJECT OVERVIEW

HyLife Foods LP (HyLife Foods) operates the Hylife pork processing plant along PTH 16 in the Town of Neepawa in southwestern Manitoba. HyLife Foods proposes to make modifications to the pre-treatment works at the pork processing plant to better accommodate forecasted short duration/high flow surges of wastewater generated by clean-up and sanitation shifts and convey the flows to the R3 Innovations Industrial Wastewater Treatment Facility (IWWTF). The existing pork processing plant holds *Environment Act* Licence No. 1102RR (Appendix B). While no changes in licensed effluent treatment requirements or discharge for the IWWTF are proposed, a parallel submission is presented under separate cover for related alterations at the IWWTF.

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 (MSD 2016). The key consideration for assessing a Notice of Alteration (NOA) is the significance of the environmental effects and human health effects as a result of the alteration and whether there is sufficient detail to allow the Director to determine whether the effects of the alteration are significant, insignificant, or nonexistent (MSD 2016).

This NOA request report has been prepared by Stantec Consulting Ltd. (Stantec) on behalf of HyLife Foods and is submitted to MSD in support of a request for Notice of Alteration to Licence 1102RR. The existing processing plant is considered a Class 2 Development under the Classes of Development Regulation (MR 164/88).

This report documents the current relevant portions of the licensed plant operations, the proposed pre-treatment alterations, and the potential environmental effects and planned mitigation measures associated with its construction and operation.

### 1.2 THE PROPONENT

For the purposes of development licensing, the proponent is HyLife Foods LP (hereafter "HyLife Foods").

For further information regarding HyLife Foods, please contact the following:

Mr. Sheldon Stott, P.Ag.  
Director of Environmental Affairs  
HyLife Foods Ltd.  
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La Broquerie, MB R0A 0W0  
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This Notice of Alteration was prepared by Stantec Consulting Ltd. The local contact is:

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## 1.3 LAND OWNERSHIP AND PROPERTY RIGHTS

The existing hog processing plant is located in the Town of Neepawa on property owned by HyLife Foods (Neepawa Land Titles Office 2016). The legal description for the subject properties are described as SW35-14-15WPM and Lot 5, Plan 7402 (NLTO). Current Certificates of Title for the property (the Site) are CT# 2522732/5 and CT# 2522733/5 for HyLife (see Stantec 2016 NOA for copies). The existing plant currently occupies approximately 12.5 ha on the site.

## 1.4 EXISTING CONDITIONS

The existing environment has been described in previous HyLife NOA submissions, specifically within the 2016 NOA submission. Readers are referred to that NOA (Stantec 2016) for details if required.

The parcel of land for the Project has been owned and occupied by HyLife Foods for industrial food processing since 2007. The land uses adjacent to the HyLife Foods site include a mix of commercial/industrial, rural residential, and open space/recreational. The Project site is subject to the Town of Neepawa Zoning By-Law No. 2650 and is a permitted use under the presently zoned designation of "MH – Industrial Heavy" (Town of Neepawa 1987). The proposed alteration area is already developed as part of the pork processing plant compound and is considered previously disturbed.

The Project site is accessible directly from Provincial Trunk Highway (PTH 16) along the south, and rural roads to the immediate west (Road 86W) and east of the plant property. There is no direct rail service at the Project site. An electric transformer provides power to the site via overhead utility lines located adjacent to the west and south boundaries of the Project site. Potable water is provided from the Town of Neepawa water treatment plant and natural gas is provided by Manitoba Hydro. Wastewater treatment is provided by the R3 Innovations IWWTF adjacent to the pork processing plant site.



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## 1.5 PREVIOUS ALTERATIONS/STUDIES

Since 2007, after acquiring the former Springhill Farms processing plant, HyLife Foods has progressively made modifications to the plant. The alterations that have occurred at the plant between 2007 and 2017 are summarized in the table below.

**Table 1-1 HyLife Foods Plant and IWWTF Licence NOAs 2007-2017**

Date	Notice of Alterations	NOA Approval
2007	Equipment modernization and plant modifications in cutting and packaging operations – dehaired equipment replacement, new carcass sprayers Hog capacity – 18,250 hogs/week	December 2007
	Leaf lard processing not yet implemented – remains a future project	
2008	Additions to shipping/staging area – shipping/ receiving building, dirty kill expansion, mezzanine addition, office/welfare area additions	July 2008
2009	Modernization of CO2 stunning system	August 2009
2010	Increase processing capacity to 27,550 hogs/week – increase in on-site live hog storage, kill line speed, addition of second cut shift, addition of snap chill freezer, increase in carcass cooler size	September 2010
	Addition of 1,806 m2 snap chill building not yet implemented – remains a future project	
2013	Increase processing capacity to 37,500 hogs/week – additions for casings and heparin production, additional wastewater treatment requirements at the existing R3 Innovations IWWTF, additional treatment infrastructure for changes in wastewater flow and loading	December 2014
	Addition of 353 m2 heparin/casings building not yet implemented – remains a future project	
2015	Addition of biosecurity trailer bake bay	May 2015
2016	Addition of larger cut floor, additional on-site freezer capacity, improvements to hog receiving facility with the addition of 996 m2 to replace Barn #3 (former Springhill Farms Barn), and improvements for handling on-site trailer parking	June 2016
	Previously approved alterations include – 1,115 m2 cooler expansion, space for future robotic equipment in new palletizing building (not yet implemented)	
2017	Addition of 2,702 m2 receiving facility to add space for 3,500 hogs located on the northwest side of the existing barn footprint (replaced 996 m2 receiving facility addition which was not implemented)	March 2017
2017	Temporary transfer of truck wastewater from R3 Innovations Inc. facility to Town of Neepawa wastewater treatment lagoon for period of 5-6 weeks	March 2017



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## **1.6 SCOPE OF THE ASSESSMENT**

### **1.6.1 Spatial and Temporal Boundaries**

The pork processing plant is located immediately north of 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 consistent with boundaries as defined in the previous 2016 NOA. The temporal boundaries for the assessment are defined as Construction phase, Operation phase, and Decommissioning phase. Spatial and temporal boundaries are summarized in Table 1-2.

**Table 1-2 Spatial and Temporal Boundaries**

<b>Spatial Boundaries</b>	<b>Temporal Boundaries</b>
Project Site – the physical footprint of the existing plant (approx. 12.5 ha) within the subject property, part of SW35-14-15W (see Figure 1-1)	Construction phase – a period of six months in 2018 over which construction is planned to occur
Local Assessment Area – area up to a three-km radius from the Project site (area over which direct effects of the Project are expected to occur)	Operation phase – the period over which the facility will be in operation, at least 50 years
Regional Assessment Area – 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)	Decommissioning phase – there are currently no plans for the plant or the IWWTF to be decommissioned. Should decommissioning occur at some point in the future, it would be anticipated to consist of the removal of all HyLife Foods equipment from 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 NOA request, and includes assessing project-specific environmental effects. The assessment focuses on valued components (VCs), which are environmental components of certain value or interest to regulators and other parties and are identified based on the 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 (e.g., direction, magnitude, geographical extent, duration, frequency, reversibility).

#### **1.6.2.1 Selection of Project Interactions and Valued Components**

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

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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
Air quality	x	Minor air emissions are anticipated from construction activities related to on-site vehicle and equipment use. Operational air emissions will be limited to truck usage related to removal of screening solids during operation. Both construction and operational emissions are expected to be negligible in the context of the operational traffic at the site.
Greenhouse gas emissions	x	Construction and operation activities can contribute to GHG from on-site equipment and truck usage and combustion sourced building heating. No substantial change to natural gas, electricity, or diesel fuel use is anticipated so no change in GHG production is anticipated.
Soils/terrain	x	Expansion of the building footprint on the site will result in limited disturbance of soils that have been previously disturbed during past development of the site.
Surface water/ground-water	x	The proposed upgrades/additions will be located on the existing developed property. Stormwater will continue to be managed by surface ditching. The potential to affect surface water quality of the Whitemud River (1 km 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 if necessary. The addition of a new pre-attenuation building and tank will be slab on grade construction with no effects to surface/ground water anticipated.
Vegetation	x	The proposed tank and controls building will be located in a previously disturbed/developed area of the site with no native vegetation. All proposed works will be conducted in previously disturbed and developed areas of the site.
Wildlife and wildlife habitat	x	No substantive wildlife or wildlife habitat is present on the Site.
Property and land use	x	Site activities occur within existing industrial area in an area that has supported the current land use for many years. The project site is zoned for the existing/proposed land use. No effects to land use will result.
Infrastructure and services	√	<b>The proposed works will generate a short term negligible increase in traffic during construction. Alterations at the pork processing plant pre-treatment will accommodate a slight increase in pre-treated wastewater flow to the IWWTF. Alterations will be required at the IWWTF to accommodate the change in flow of pretreated influent to the IWWTF.</b>
Employment and economy	x	Benefits related to employment, tax generation from construction and continued operation are negligible and positive.

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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
Heritage resources	x	The project site is located within an existing industrial area that is already disturbed; there are no related heritage concerns.
Aesthetics and Noise	x	The project site is located within an existing industrial area with the proposed alteration consistent with current building types and there will be no substantial change to area visual aesthetics. Noise generation will continue to be typical of historic use in the area and no noise complaints have been received by HyLife in several years of operation including during previous construction and plant expansions.
Health and Safety	x	Contractors engaged in the construction phase of the proposed Project will be subject to site specific health and safety plans and worker protection standards and procedures under the provincial <i>Workplace Safety and Health Act</i> .  Existing worker health and safety programs will be updated/maintained as part of the operations at the Project site.

Following the identification of valued components, an analytical framework is used to evaluate and characterize the potential project effects on those VCs identified as having a potential project interaction, 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 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	<b>Positive</b> — an improvement in the valued component compared with existing conditions and trends <b>Adverse</b> — a decline in the valued component compared with existing conditions and trends <b>Neutral</b> — no change in the valued component from existing conditions and trends

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**Table 1-4 Characterization of Residual Environmental Effects**

Characterization	Description	Quantitative Measure or Definition of Qualitative Categories
Magnitude	The amount of change in the VC relative to existing conditions	<p><b>Negligible</b>—no measurable change</p> <p><b>Low</b>— a change that falls within the level of natural variability</p> <p><b>Moderate</b>— a measurable change which is unlikely to affect the valued component</p> <p><b>High</b>— a measurable change which is likely to affect the valued component</p>
Geographic Extent	The geographic area in which an environmental effect occurs	<p><b>PS</b>—residual effects are restricted to the Project site</p> <p><b>LAA</b>—residual effects extend into the LAA (up to a 3-km radius of project site)</p> <p><b>RAA</b>—residual effects extend to other adjacent areas to the property up to a 10-km radius</p>
Frequency	Identifies when the residual effect occurs and how often during the Project or in a specific phase	<p><b>Single event</b>— residual effect occurs once throughout the life of the Project</p> <p><b>Multiple irregular event</b>— residual effect occurs sporadically and intermittently (no set schedule) throughout</p> <p><b>Multiple regular event</b>— residual effect occurs repeatedly and regularly throughout</p> <p><b>Continuous</b>—residual effect occurs continuously throughout the life of the Project</p>
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	<p><b>Short-term</b>— residual effect restricted to the duration of construction (assumed to be six months)</p> <p><b>Medium-term</b>— residual effect extends up to 10 years</p> <p><b>Long-term</b>— residual effect extends for longer than 10 years</p>
Reversibility	Pertains to whether the VC can return to its existing condition after the project activity ceases	<p><b>Reversible</b>—the effect is likely to be reversed after activity completion and decommissioning</p> <p><b>Irreversible</b>—the effect is unlikely to be reversed even after decommissioning</p>
Ecological and Socio-economic Context	Existing condition and trends in the area where environmental effects occur	<p><b>Undisturbed</b>—area is relatively undisturbed or not adversely affected by human activity</p> <p><b>Disturbed</b>—area has been substantially previously disturbed by human development or human development is still present</p>

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### **1.7 PUBLIC ENGAGEMENT**

The existing processing plant is located on one privately-owned parcel of land within an area that is appropriately zoned for heavy industrial land use. The plant has been operated at this location by HyLife Foods since 2007. No formal public engagement is planned beyond the placement of the NOA on the Public Registry for public review and comment if required by MSD.

### **1.8 FUNDING**

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

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## 2.0 PROJECT DESCRIPTION

### 2.1 EXISTING LICENSED DEVELOPMENT

HyLife Foods has been in operation at the project site since 2007 and is located on a site zoned “MH – Industrial Heavy” under the Town of Neepawa Zoning By-law No. 2650. The plant and general office occupies approximately 12.5 ha on the site. The processing plant is licensed to process 37,500 hogs/week (annual average). Plant production is anticipated to be approximately 35,000 hogs/week by the end of 2017.

A site plan illustrating the updated planned layout of both the processing plant project site and the IWWTF is provided as Figure 1-1. More detailed information on the existing processes at the plant can be found in previous NOA submissions (HyLife 2015; Stantec 2016; Stantec 2017).

#### 2.1.1.1 Water Use and Wastewater Production

Water use and wastewater production at the plant was summarized in the Stantec 2016 NOA. Currently, HyLife operates the existing screen and DAF units at the processing plant to pre-treat all process wastewater prior to discharging to the IWWTF. The annual average daily volume of effluent discharged to the IWWTF was 1,161 m<sup>3</sup>/day in 2016 (Stantec 2017).

### 2.2 PROPOSED ALTERATIONS

The proposed alterations at the pork processing plant will modify the existing pre-treatment works to better accommodate forecasted short duration/high flow surges of wastewater (primarily generated by clean-up and sanitation shifts) and moderate the flows to the IWWTF. The proposed alterations will allow continued use of the existing conveyance infrastructure from the pork processing plant to IWWTF and eliminate the need to add an additional pipeline to the IWWTF. No change in the 37,500 hogs per week licensed processing capacity is proposed.

Specifically, the proposed Project consists of:

- Replacement of the existing pumps in the cut floor wastewater lift station with two 70-L/s pumps to match the increased size of the rotary drum screen.
- Replacement of the existing rotary drum screen with a larger capacity unit and addition of a screened wastewater lift station inside the pork processing plant.
- Addition of a new pre-attenuation controls building and a flow pre-attenuation tank on the north side of the processing plant near the primary effluent lift station (see Figure 1-2).

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A short description of the existing pre-treatment works is provided along with a description of the proposed alterations in the following sub-sections.

### 2.2.1 Pretreatment at the HyLife Pork Processing Plant

The existing wastewater pre-treatment system at the Hylife pork processing plant was described in the AECOM June 2013 NOA as follows:

*"HyLife Foods passes the wastewater from the processing operations through a screen and Dissolved Air Flotation (DAF) unit prior to transfer to the IWWTF. The material removed via the screens and DAF are disposed of at an off-site third-party rendering facility. After the process water passes through the screen and DAF, it is transferred directly to a manhole and is combined with the sanitary wastewater, the hog receiving facility wastewater and the truck wash wastewater. This combined wastewater flows by gravity from the manhole to a raw water influent pump station that conveys the flow to the screening/pumping building at the IWWTF via a forcemain."*

Pre-treatment requirements dealing with process wastewater at the hog processing plant, prior to discharge to the IWWTF, are included under Licence No. 1102RR in clauses 32 – 34 (see Appendix B).

- 32. The Licencee shall operate and maintain the screening and DAF unit to pre-treat all process wastewater prior to discharging to the IWWTF.*
- 33. The Licencee shall direct all solids from the DAF unit to an off-site rendering facility that is licensed under The Environment Act or under the appropriate legislation of another corresponding jurisdiction.*
- 34. The Licencee shall not release any process wastewater or sanitary wastewater from the Development except through the wastewater collection system to the industrial wastewater treatment facility (IWWTF).*

For the proposed project, wastewater from the recently constructed cut floor and production areas (approved in Licence 1102 R) will be collected in a new lift station and pumped to a new rotary drum screen that will replace a smaller unit in the pre-treatment area of the pork processing plant. The screenings will continue to be collected in containers and disposed of at an off-site location licensed to accept the material. The screened wastewater will flow to a new lift station and be pumped to a new flow pre-attenuation control tank. The wastewater from the pre-attenuation tank will then be allowed to flow to the existing manhole where it will combine with the wastewater from other sources at the facility and be conveyed to the IWWTF via the existing influent pump station and forcemain.

#### 2.2.1.1 Cut Floor Wastewater Lift Station

The pumps in the existing cut floor wastewater lift station will be upgraded to convey all flows from the newly constructed production area, including daily sanitation events. Flow rates from

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the new production area at the plant are estimated to be as high as 140 litres/second. Two larger sized pumps are proposed to be installed for the lift station with each pump having a capacity of 70 litres/second. The lift station will convey wastewater to the new rotary drum screen in the pre-treatment area of the plant (see Figure 1-2).

### **2.2.1.2 Rotary Drum Screen**

Peak flow events have resulted in pre-treatment overflow issues in the past due to the limitations of the existing screen units. As the existing screen in the pre-treatment works is currently undersized for handling instantaneous flow events and accommodating maintenance requirements, a new screen (sized to accommodate the higher flows) is proposed to replace the existing units and increase the screening capacity. The screen will be sized to accommodate an instantaneous flow of up to 140 L/s with capacity to handle an additional 290 m<sup>3</sup>/day flow of process wastewater from the cut floor pump station.

The new rotary drum screen will remove large solids from the production floor process wastewater prior to subsequent transfer to the proposed pre-attenuation tank. The screen will be sized to receive the 140 L/s maximum flow rate from the cut floor lift station with the recovered screenings collected for off-site rendering as per clause 33 of the plant's licence. The interior and exterior of the rotary drum screen will have hot water spray nozzles as well as travelling high pressure hot water spray bars to maintain screen capacity. The screenings recovered will increase in proportion to the amount of pork processed at the facility and will be in line with expected volumes, and within capacity of the third-party handler of the material. The resulting screened wastewater will flow to a proposed new lift station for transfer to the flow pre-attenuation tank.

### **2.2.1.3 Screened Wastewater Lift Station**

Installation of a new lift station is proposed to pump the screened wastewater from the new rotary drum screen to the new pre-attenuation tank. The new lift station will include an overflow outlet to the existing raw wastewater lift station to handle any flows in excess of the pump capacity. The pump in the new screened wastewater lift station will be of the same capacity as those in the existing raw wastewater lift station (approximately 140 litres/second) so that the backup pump in the existing station can act as backup to the duty pump in either the new screened wastewater lift station or the existing raw wastewater lift station.

### **2.2.1.4 Flow Pre-Attenuation Tank and Controls Building**

The addition of a flow pre-attenuation tank is proposed to moderate the wastewater flow to the front-end of the IWWTF (i.e., pretreatment building). Current instantaneous flow is approximately 55-65 litres/second with potential for the new flows to reach a maximum of 140 litres/second (as forecasted) during sanitation. The pre-attenuation tank, and related controls building, will provide surge capacity to accommodate the increased peak flows of process wastewater

## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Project Description  
February 20, 2018

(primarily from sanitation shifts) while still using the existing pump station and forcemain to convey the combined wastewater from all sources at the pork processing plant to the IWWTF.

Combined wastewater flows from the new cut floor and existing production area will be directed to the new aboveground flow pre-attenuation tank via the new and existing lift stations. The new flow pre-attenuation tank and associated building will be constructed at the HyLife pork processing plant site near the primary effluent lift station (see Figure 1-2). The tank will be designed as a steel bolted insulated, single-walled tank with a cone-shaped roof on a 9 m x 9 m (30 ft x 30 ft) base situated on a concrete slab. The volume of the tank is expected to be 570 m<sup>3</sup> (150,000 US gallons). A controls building will be constructed adjacent to the tank to house the pre-attenuation control valves and a flow meter. Using an estimated pre-attenuation tank effluent flow rate of 40 litres/second, the contents of the tank can be properly conveyed to the IWWTF via gravity feed to the existing pump station/forcemain within approximately 13 hours. The total flow from the plant is expected to be 1,297 m<sup>3</sup>/day over a seven-day week and will not increase the IWWTF effluent discharge beyond the licensed daily flow of 1,520 m<sup>3</sup>/d.

### 2.2.2 Construction Inputs and Outputs

During the construction phase of the proposed alterations, materials required may include concrete, steel, pipe, pumps, screens, rebar, lumber, flooring, fuel and other materials. Minor amounts of raw construction materials such as gravel and fill for the construction of the pump stations and concrete works will also be required. 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 the site. At peak construction, it is estimated that approximately 20 construction staff will be involved in the project works at the pork processing plant and the IWWTF. Equipment utilized on-site will be typical for construction, including a crane to be used for tank installation.

Outputs during construction can include surface runoff and fugitive dust and vehicle emissions from construction equipment. Other outputs generated from construction work related to spent packaging materials, solvents, used oils, surplus building materials, etc. will be regularly transported off the site and disposed of or recycled according to applicable regulations.

### 2.2.3 Operation Inputs and Outputs

#### 2.2.3.1 Water Use and Wastewater Production

The alterations at the plant will change water and wastewater flows, resulting in an increase in the volume of water used and wastewater produced. The previous 2017 NOA estimated the daily water requirement for the total plant at 1,363 m<sup>3</sup>/day (Stott 2017). Proportionally, the proposed alterations may result in a marginal increase in water use (essentially limited to spray wash consumption for the new rotary drum screen) that is expected to present a negligible increase in demand in the context of the existing water supply. The increased wastewater production will be addressed by the proposed changes at the IWWTF (as described under separate cover) and effluent quality and quantity will remain within the IWWTF licensed limits.



## **HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION**

Project Description  
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### **2.2.3.2 Chemical Usage**

Chemical usage is not expected to substantially change on the pre-treatment side at the pork processing plant.

### **2.2.3.3 Fuel, Electrical and Gas Utilities**

Building heating for the alterations is not expected to change at the pork processing plant. As such, natural gas load increases for building heat are expected to be negligible (Stott 2017). Electricity is provided to the plant site via a single transformer substation located west of the Project site. It is expected that the increase in electricity usage for the proposed alterations will be negligible, and the plant's single existing transformer will be sufficient. Similarly, no substantial increase in diesel fuel use is expected as a result of the proposed project.

### **2.2.3.4 Waste Management**

Typical construction waste will be generated from the alterations at the pork processing plant and will require proper handling and disposal at licensed landfills. Similarly, the operational volumes of domestic waste and recyclables are not anticipated to substantively change with the proposed alterations.

### **2.2.3.5 Workforce**

The 2017 NOA indicated that 1,250 staff members would be required to support the fully licensed operation. The size of the construction workforce for the proposed alterations is expected to be approximately 20 workers at construction peak. No new general operational staff are contemplated with the alterations.

### **2.2.3.6 Traffic Volumes**

Traffic is estimated to remain the same at approximately 950 to 1,000 vehicles/day (staff and operations) for licensed full production of 37,500 hogs/week as summarized in the Stantec 2016 NOA. Removal of additional screening solids from HyLife's plant may result in an increment of approximately one truck per month.

There will be a negligible and temporary short-term increase in traffic related to the construction phase for the proposed alterations.

### **2.2.3.7 Health and Safety**

HyLife Foods' commitment to the ongoing health and safety of its employees remains in place (HyLife Foods 2017). HyLife's health and safety plans are available for review upon request.



## **HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION**

Project Description  
February 20, 2018

### **2.3 PROJECT SCHEDULE**

The start of the construction phase is expected to be February 2018 with completion by June 2018.

## **3.0 ENVIRONMENTAL EFFECTS AND MITIGATION**

This section outlines the assessment of environmental effects for those components identified in Table 1-3 as having potential project interactions. The assessment is limited to Project effects on infrastructure and services.

### **3.1 ASSESSMENT OF ENVIRONMENTAL EFFECTS**

#### **3.1.1 Infrastructure and Services**

During the construction phase, changes to infrastructure and services can occur from an increase in the number of vehicles travelling to and from the Project site with construction equipment and associated materials. Effects will be mitigated by limiting vehicular access to the construction area to existing access points so that the potential for conflicts with local traffic from turning vehicles is reduced. The potential effects of the increase in vehicle traffic along PTH 16 over existing levels (i.e., up to 3,260 veh/day AADT, MIT and University of Manitoba 2015) as noted in the 2016 and 2017 NOAs, are anticipated to be negligible, irregular, and short-term in duration during construction.

Operations at the processing plant after implementation of the proposed pre-treatment changes are expected to result in a negligible change to operational traffic and utility usage. The potential adverse residual effects on infrastructure related to traffic (i.e., disposal of screening solids in the form of one more truck load per month) are expected to be negligible, limited to the LAA, long-term in duration, regular in frequency, and reversible upon Project decommissioning. Effects on utility usage are expected to be neutral, negligible, limited to the PS, long-term, continuous, and reversible.

The proposed alteration at the processing plant will result in an increase of flow to approximately 1,297 m<sup>3</sup>/day due to sanitation events as per the previously approved NOA. The total flow from the plant remains less than the licensed design effluent flow of 1,520 m<sup>3</sup>/day at the IWWTF.

The proposed alterations at HyLife's food plant are expected to have a negligible contribution to operational wastewater flow in the LAA. The proposed alterations to the pre-treatment works at the pork processing plant will better accommodate the forecasted short duration/high flow surge of wastewater generated by clean-up and sanitation shifts and better accommodate and convey flows to the R3 IWWTF with minimal disruption to operations at both facilities. These required process alterations will not interfere with the ability of R3 Innovations to continue to meet licence requirements (once the proposed corresponding alterations at the R3 facility are implemented). Changes in wastewater flow are long term in duration, continuous, and reversible upon Project decommissioning.

## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Environmental Effects and Mitigation  
February 20, 2018

### 3.1.2 Summary of Mitigation Measures

Proposed mitigation measures incorporated as part of this NOA includes those standard practices and procedures identified under the previous 2017 NOA (Stantec 2017) as well as other general mitigation measures that are typically applied in the course of project construction and operation. The Project itself is meant to mitigate the foreseen operational effects associated with a licensed production rate of 37,500 hogs/week. Mitigation measures to be employed to prevent 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).
- Excavated topsoil will be stockpiled separately on the plant site for future use in leveling activities.
- Material stockpiles will be placed in areas identified and approved by HyLife Foods; stockpile heights will be limited.
- Silt fences and other erosion protection measures will be installed if required during construction for stormwater to prevent erosion and sediments from being transported off-site past site boundary ditching to surface water.
- Surface water drainage patterns will be maintained on-site.
- Exhaust emissions from construction will be minimized through the proper maintenance of vehicles and equipment and restricting vehicle idling.
- Construction waste will be gathered and properly disposed of at a regional licensed landfill; recycling of construction waste will be encouraged to the extent possible.
- 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.
- The Project site will be regularly inspected for loose debris and waste to maintain a clean site.
- Vehicle and truck traffic will be limited to existing traffic routes and access points only.
- Contractors engaged in construction activities at the Project site will adhere to federal and provincial Health and Safety legislation.



## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Environmental Effects and Mitigation  
February 20, 2018

- Contractors will adhere to a Project-specific safety plan developed as appropriate.
- Project site employees will be kept aware of safety requirements and on-site construction works to ensure worker safety.
- Workers will be provided with appropriate personal protective equipment (PPE); hearing protection will be provided to employees/workers as required.
- The exterior of the aboveground flow pre-attenuation tank will be regularly inspected and maintained to prevent leaks and failures as part of ongoing operations.
- New piping will be tested prior to operation to detect and repair potential leaks.

### 3.2 SUMMARY OF RESIDUAL EFFECTS CHARACTERIZATION

A summary of residual environmental effects characterization is found in Table 3-1. Residual effects related to air quality, greenhouse gas emissions, and infrastructure and services are characterized. Positive effects are not addressed, only neutral and adverse effects are characterized.

**Table 3-1 Summary of Residual Environmental Effects**

Project Effects	Residual Environmental Effects Characterization						
	Direction	Magnitude	Geographical Extent	Duration	Frequency	Reversibility	Ecological and Socio-economic Context
<b>Infrastructure and Services</b>							
Traffic levels	A	N	LAA	S	MR	R	D
Utility usage, wastewater Treatment at IWWTF	A	L	PS	L	C	R	D

# HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Environmental Effects and Mitigation  
February 20, 2018

**Table 3-1 Summary of Residual Environmental Effects**

Project Effects	Residual Environmental Effects Characterization						
	Direction	Magnitude	Geographical Extent	Duration	Frequency	Reversibility	Ecological and Socio-economic Context
See Table 1-4 for detailed definitions <b>KEY</b> <b>Direction</b> P Positive A Adverse N Neutral <b>Magnitude</b> N Negligible L Low M Moderate H High <b>Geographical Extent</b> PS Project Site LAA Local Assessment Area RAA Regional Assessment Area				<b>Duration</b> S Short-term M Medium-term L Long-term	<b>Frequency</b> S Single event MI Multiple irregular event MR Multiple regular event C Continuous	<b>Reversibility</b> R Reversible IR Irreversible	<b>Ecological/Socio-Economic Context:</b> U Undisturbed D Disturbed  N/A Not applicable

## 3.3 ACCIDENTS AND MALFUNCTIONS

The effects of accidents and malfunctions for the Project are primarily related to the potential for mechanical equipment failure, fuel or other chemical spills, and transportation accidents as noted in the previous 2017 NOA. During construction and operation, 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 transportation accidents that can result in the release of vehicle fluids to the environment (i.e., diesel, gasoline, oils, etc.) and the materials the vehicles were transporting. 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 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 phase are anticipated to be irregular and short-term in duration. The potential for an increase in vehicle traffic along PTH 16 over existing levels that could lead to transportation accidents is anticipated to be negligible.

Operational traffic at the plant site operating at slow speeds and the utilization of qualified transport companies reduces the potential for on-site transportation accidents and risks.



## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Environmental Effects and Mitigation  
February 20, 2018

Measures to prevent adverse effects associated with fire/explosion, spills and transportation accidents 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 are available on-site during operations and are maintained to manufacturer's standards.
- Potentially hazardous materials and chemicals are stored and handled at dedicated areas and labelled in accordance with applicable regulatory requirements.
- Hazardous materials are 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 clean-up 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.
- Above-ground storage tanks will be regularly inspected and maintained to prevent leaks and failures.
- Tank leakage will be detected on the exterior of the tank should it occur which similar to how leakage is monitored on existing tanks at the IWWTF.
- Existing traffic control measures (i.e., speed limits, signage) will be adhered to.
- HyLife Foods continues to maintain policies related to emergency preparedness, workplace hazardous materials information system (WHMIS) and spill response procedures.

Operationally, potential spills from the pre-attenuation storage tank and related piping may result from collisions with yard vehicles or other equipment. As the pre-attenuation storage tank will be above-ground, it will be provided with appropriate collision protection measures and will be visually inspected on a regular basis for signs of wear or premature failure.

### Summary

To prevent accidents and malfunctions, the proposed plant alterations will be operated in accordance with regulatory requirements. The implementation of, 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.



## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Summary Conclusions  
February 20, 2018

### 4.0 SUMMARY CONCLUSIONS

Stantec has prepared this environmental assessment report on behalf of HyLife Foods LP in support of the NOA application for the proposed plant alterations. The NOA application is filed in accordance with Section 14(1) of *The Environment Act*.

Potential interactions of the proposed 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 information available to date as presented in this report, the proposed alterations are not expected to create significant adverse effects to the biophysical and socio-economic environment. It is anticipated that the proposed alterations at the plant will be considered as a minor alteration to the licensed development.



## HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

References  
February 20, 2018

### 5.0 REFERENCES

#### 5.1 LITERATURE CITED

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HyLife Foods LP. 2017. Careers – Health & Safety, HyLife™ Food's Ongoing Commitment to Employee Safety. Available at: <http://www.HyLifefoods.com/careers/>. Accessed September 29, 2017.

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Intergovernmental Affairs. 2006. The Neepawa and Area Planning District Development Plan By-law No. 78. Community Planning Services Branch. Brandon, MB.

Manitoba Sustainable Development (MSD). 2016. Information Bulletin – Alterations to Developments with Environment Act Licences. Available at: [http://www.gov.mb.ca/sd/eal/pubs/alteration\\_guidelines2016.pdf](http://www.gov.mb.ca/sd/eal/pubs/alteration_guidelines2016.pdf). Accessed September 15, 2017.

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Stantec Consulting Ltd. 2017. HyLife Foods LP Processing Receiving Facility Expansion Notice of Alteration. Final Report. Prepared for HyLife Foods Ltd. Neepawa, MB.

The Intergovernmental Panel on Climate Change (IPCC). 2006. 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Volume 2 Energy. National Greenhouse Gas Inventories Programme. Institute for Global Environmental Strategies. Hayama, Kanagawa JAPAN.

The Town of Neepawa. 1987. Town of Neepawa Zoning By-law No. 2650, Zoning Maps One and Two. Manitoba Municipal Affairs, Municipal Planning. Neepawa, MB.

#### 5.2 PERSONAL COMMUNICATIONS

Stott, Sheldon. Director of Environmental Affairs, Hylife Foods Ltd. Telephone conversation with Stephen Biswanger, Stantec Consulting Ltd., September 7, 2017.

Stott, Sheldon. Director of Environmental Affairs, Hylife Foods Ltd. Email correspondence to Stephen Biswanger and Bill Krawchuk, Stantec Consulting Ltd., October 25, 2017.



## **HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION**

### References

February 20, 2018

Stott, Sheldon. Director of Environmental Affairs, Hylife Foods Ltd. Telephone conversation with Stephen Biswanger, Stantec Consulting Ltd., November 10, 2017.

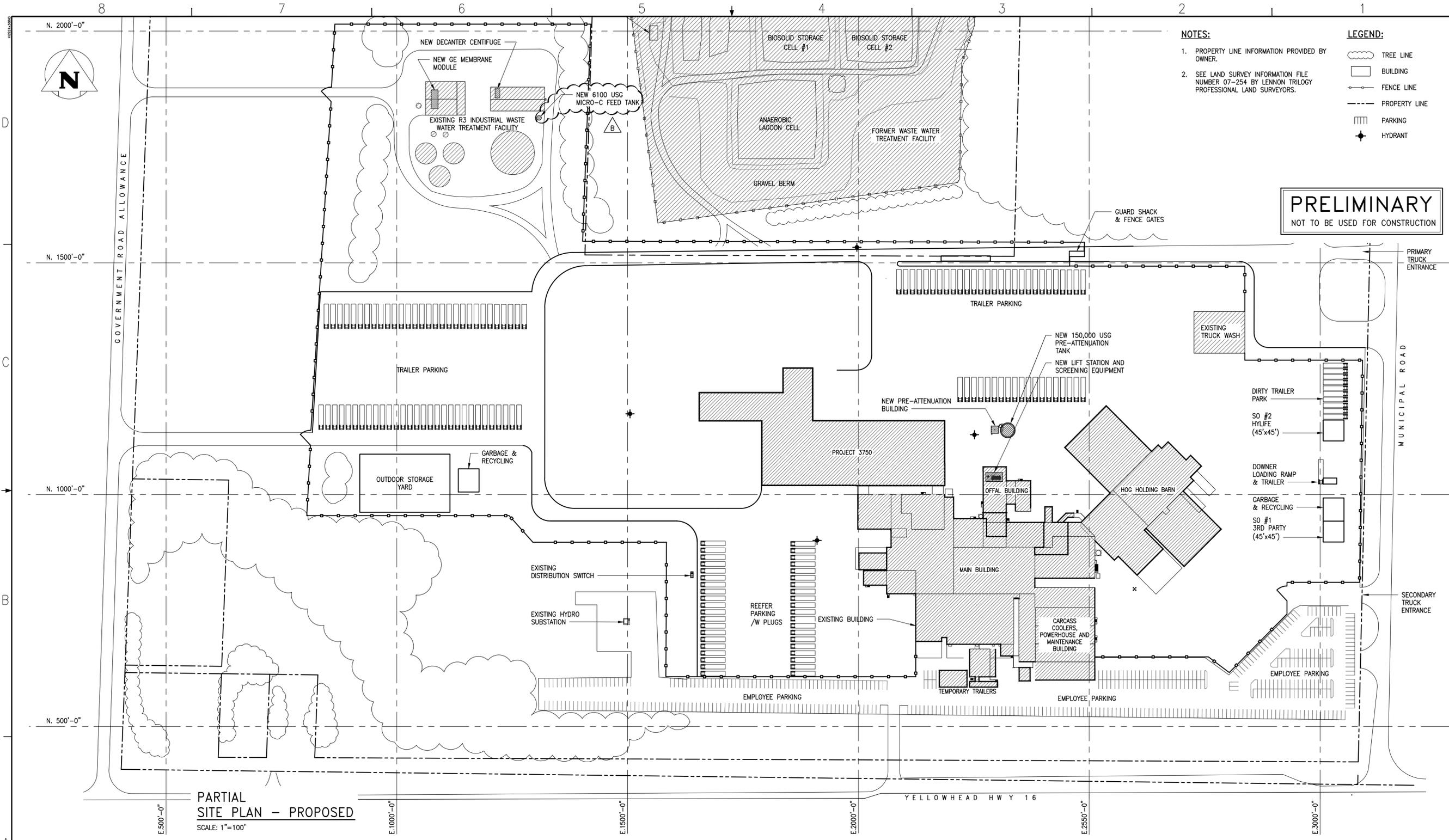
# HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Appendix A Figures  
February 20, 2018

## Appendix A **Figures**



Filepath: \\A:\MS\17-3007-003\317.B.PLN.001 - Tabir317.B.PLN.001 Plotted By: rperalta 17/12/15 [Fri 4:51pm]  
 24"x36" PLOT SCALE: 1"=100'



- NOTES:**
- PROPERTY LINE INFORMATION PROVIDED BY OWNER.
  - SEE LAND SURVEY INFORMATION FILE NUMBER 07-254 BY LENNON TRILOGY PROFESSIONAL LAND SURVEYORS.

- LEGEND:**
- TREE LINE
  - BUILDING
  - FENCE LINE
  - PROPERTY LINE
  - PARKING
  - HYDRANT

**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION

**PARTIAL SITE PLAN - PROPOSED**  
 SCALE: 1"=100'

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE	NO.	YY/MM/DD	DESCRIPTION	DESIGN BY	DESIGN CHECK
10							
9							
8							
7							
6							
5							
4							
3	R317.C.PLN.0001	SEWER INSTALLATION LAYOUT PLAN	B	17/12/15	RE-ISSUED FOR PERMIT	AJD	
2	R317.M.PLN.0100	DAF ROOM AND PRE-ATTENUATION TANK SITE PLAN					
1	R317.M.PLN.0111.01	R3 PRE-TREATMENT BLDG. DECANTER CENTRIFUGE No.3 PLAN	A	17/11/10	ISSUED FOR PERMIT	AJD	

REVISIONS 1		REVISIONS 2	
NO.	YY/MM/DD	DESCRIPTION	DESIGN BY

CERTIFICATE OF AUTHORIZATION

AUTHENTICATION FOR CURRENT REVISION  
 ENG. STAMP

CLIENT: **HYLIFE™**

**KGS GROUP CONSULTING ENGINEERS**

DESIGN BY: AJD	DATE (YY/MM/DD): 17/11/03
DESIGN CHECK: JFS	DATE: 17/11/07
DWG CHECK: JFS	DATE: 17/11/07

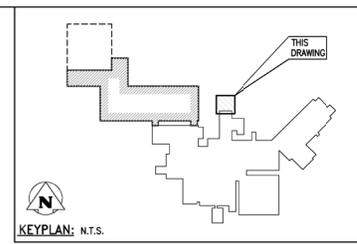
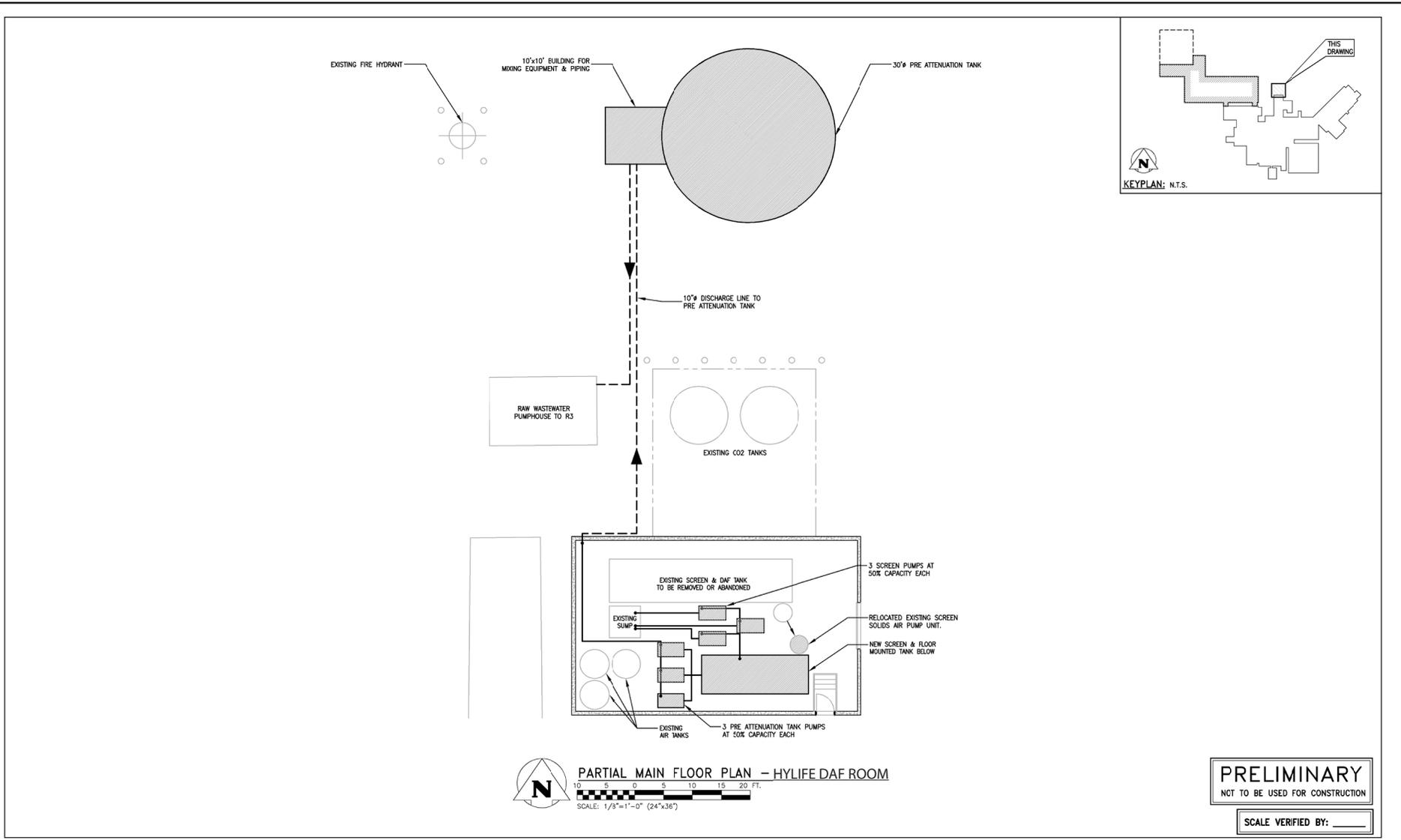
PROJECT: **PROJECT R3 2017 R3 WASTEWATER TREATMENT FACILITY UPGRADE**

TITLE: **BUILDING PARTIAL SITE PLAN PROPOSED**

Figure 1-1

PROJECT NO. 17-3007-003    DWG. NO. R317.B.PLN.0001    REV. B





**PARTIAL MAIN FLOOR PLAN – HYLIFE DAF ROOM**  
 SCALE: 1/8"=1'-0" (24"x36")

**PRELIMINARY**  
 NOT TO BE USED FOR CONSTRUCTION  
 SCALE VERIFIED BY: \_\_\_\_\_

Source: KGS Group; Project R3 Neepawa Wastewater Plant Upgrade;  
 Drawing M1: DAF Building & Pre Attenuation Tank Site Plan



Project Location: 111440368  
 Town of Neepawa, Manitoba  
 Prepared by AC on 2018-02-01  
 Technical Review by BK on 2018-02-01

Client/Project:  
 HYLIFE FOODS LTD.  
 Hylife Foods LP Processing Facility  
 Notice of Alteration

Figure No.  
**1-2**  
 Title  
**Hylife DAF Building & Pre Attenuation Tank Site Plan**



# HYLIFE FOODS LP PROCESSING PLANT NOTICE OF ALTERATION

Appendix B Licence Correspondence  
February 20, 2018

## Appendix B Licence Correspondence



Environmental Stewardship Division  
Environmental Approvals Branch  
123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5  
T 204 945-8321 F 204 945-5229  
[www.gov.mb.ca/conservation/eal](http://www.gov.mb.ca/conservation/eal)

**CLIENT FILE NO.: 2754.10**

March 24, 2017

Sheldon Stott  
HyLife Foods LP  
Box 10000, 623 Main Street  
Neepawa, MB R3C 1A5

Dear Mr. Stott:

Enclosed is revised **Environment Act Licence 1102 RR** issued to **HyLife Foods LP** for the operation of the Development being a hog processing plant located in SW 35-14-15WPM in the Town of Neepawa with all wastewater being discharged to the R3 Innovations Inc. & Town of Neepawa industrial wastewater treatment facility (IWWTF) for treatment and in accordance with the Proposal filed under *The Environment Act*.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

A Notice of Alteration must be filed with the Director for approval prior to any alteration to the Development as licensed. For further information on the administration and application of the Licence, please feel free to contact Peter Crocker, Environment Officer, at 204-726-6565.

Pursuant to Section 27 of *The Environment Act*, this licensing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Sustainable Development within 30 days of the date of the Licence.

Yours truly,



**Tracey Braun, M.Sc.**  
Director  
Environment Act

c: Don Labossiere, Tim Prawdzik/Peter Crocker, Environmental Compliance and Enforcement  
Public Registries

**NOTE:** Confirmation of Receipt of this Licence No. 1102 RR (*by the Licencee only*) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by April 7, 2017.

---

On behalf of HyLife Foods LP

Date

# LICENCE

Licence No. / Licence n° 1102 RR

Issue Date / Date de délivrance March 24, 2017

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 Section 11(1) and 14(2) / Conformément au Paragraphe 11(1) et 14(2)

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

**HYLIFE FOODS LP;**  
**"the Licencee"**

for the operation of the Development being a hog processing plant located in SW 35-14-15WPM in the Town of Neepawa with all wastewater being discharged to the R3 Innovations Inc. & Town of Neepawa industrial wastewater treatment facility (IWWTF) for treatment and in accordance with the Proposal filed under *The Environment Act* on June 12, 2013 and additional information provided on November 25, 2013 and notices of alteration submitted on May 22, 2015, May 18, 2016 and February 8, 2017 and subject to the following specifications, limits, terms and conditions:

## DEFINITIONS

In this Licence,

"**accredited laboratory**" means an analytical facility accredited by the Standards Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Sustainable Development 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;

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

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

"**ASTM**" means the American Society for Testing and Materials;

"**day**" or "**daily**" means any 24-hour period;

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

**\*\*A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES\*\***

**"dissolved air floatation (DAF) system"** means an aeration component in an industrial wastewater pre-treatment system;

**"effluent"** means wastewater flowing or pumped out of the hog processing plant;

**"Environment Officer"** means an employee so designated pursuant to *The Environment Act*;

**"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;

**"hog processing"** means the slaughtering, bleeding, scalding, de-hairing, pasteurization, splitting, eviscerating, cutting or packaging of hogs, the processing or rendering of edible materials, or any combination of these activities;

**"hog processing plant"** means the main hog processing plant structure;

**"Industrial Services Agreement"** means a signed and legally binding agreement, arrived at between R3 Innovations Inc. and the Town of Neepawa and the Licencee 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 of the Licencee by R3 Innovations Inc. and the Town of Neepawa;

**"industrial wastewater"** means wastewater derived from an industry which manufactures, handles or processes a product and does not include wastewater from commercial and residential buildings;

**"IWWTF"** means the Industrial Wastewater Treatment Facility owned by the Town of Neepawa and R3 Innovations Inc. and operating under Environment Act Licence No. 2870 R;

**"mg/L"** means milligrams per litre;

**"MSDS"** means material safety data sheets;

**"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;

**"process wastewater"** means a liquid stream, containing or comprised of process water or any chemicals used by the Development, which is designated for release into the environment;

**"pollutant"** means a pollutant as defined in *The Environment Act*;

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

**"sewage"** means household and commercial wastewater that contains human waste;

**"solid waste"** means solid waste as defined in *Manitoba Regulation 37/2016*, or any future amendments thereto, respecting waste disposal grounds, excluding waste rock;

**"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;

**"waste disposal ground"** means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with Manitoba Regulation 37/2016, or any future amendments thereto, or a Licence pursuant to *The Environment Act*;

**"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, industrial and process wastewater; 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 Licencee 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.

#### **Future Sampling**

1. In addition to any of the limits, terms and conditions specified in this Licence, the Licencee 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; or
  - c) conduct specific investigations in response to the data gathered during environmental monitoring programs.

#### **Reporting Format**

2. The Licencee shall submit all information required to be provided to the Director or Environment Officer under this Licence, in written and electronic format, 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 labelled with the Licence Number and Client File Number associated with this Licence.

#### **Equipment Breakdown**

3. The Licencee 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 the 24-hour environmental accident reporting line at 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.

4. The Licencee shall, following the reporting of an event pursuant to Clause 3,
  - 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**

5. The Licencee 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.
6. The Licencee 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.
7. The Licencee shall, at all times during the operation of the Development, implement a high standard of equipment maintenance and operational practices.
8. The Licencee shall implement and continually maintain in current status, an Environmental Management System (EMS) for the Development which is acceptable to the Director.

#### **Environmental Coordinator**

9. The Licencee shall designate an employee, within 60 days of the date of issuance of this Licence, as the Licencee's Environmental Coordinator, whose job description will include assisting the Licencee in complying with the limits, terms and conditions in this Licence and assisting Senior Management of the Licencee to manage environmental issues at the Development. The name of the Environmental Coordinator shall be submitted in writing to the Director within 14 days of appointment and any subsequent appointment.

**Industrial Services Agreement**

10. The Licencee shall:

- a) prepare and execute a current comprehensive and enforceable Industrial Services Agreement to be legally entered into with R3 Innovations Inc. and the Town of Neepawa, 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 Environment Act Licence No. 2870 R, 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**

11. The Licencee shall notify the designated Environment Officer not less than two weeks prior to beginning construction of the Development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
12. The Licencee 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.
13. The Licencee 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.
14. The Licencee 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 watercourses, and have an emergency spill kit for in-water use available on site during construction.

**Respecting the Operation of the Development**

15. The Licencee shall limit the rate of hog processing at the Development to no more than 37,500 hogs per week averaged over any 12 month period.

16. The Licencee shall direct all delivered, live and unloaded hogs as soon as possible into the hog receiving facility and not exceed the storage of 7,500 hogs at any time.
17. The Licencee shall remove all offal, bones, dead-on-arrival animals and solids regularly from the Development to a third party rendering facility, approved by the Director, which is licensed under *The Environment Act*.
18. The Licencee shall not direct pollutants into any surface drainage route leading off the property of the Development or into the local groundwater.
19. The Licencee shall actively participate in any future watershed based management study, plan or nutrient reduction program, approved by the Director.

#### **Respecting Air Emissions**

20. The Licencee 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.
21. The Licencee 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 specify to eliminate or mitigate a noise nuisance.

#### **Respecting Blood Collection**

22. The Licencee shall minimize the loss of blood to the process wastewater sewers by maximizing the efficiency of the blood collection to the satisfaction of the Director.
23. The Licencee shall dispose of the blood collected at the Development by having the blood hauled to a facility specializing in blood collection as approved by the Director, using vehicles utilizing containment provisions satisfactory to the Director.

#### **Respecting Solid Wastes**

24. The Licencee shall not undertake any on-site burning of solid waste.
25. The Licencee shall minimize the generation of domestic solid waste and maximize, wherever possible, the collection and recycling of recyclable wastes generated through the operation of the Development.
26. The Licencee shall:
  - a) collect, store and land apply all dry hog manure and bedding from the unloading docks, truck trailers and holding pens in accordance with *the Livestock Manure and Mortalities Management Regulation MR 42/98* or any future amendment thereof; and
  - b) direct all of the hog manure collected inside the hog processing plant, or washed off the floor of the hog holding pens, or washed out of the transporting truck

trailers, to the process wastewater sewers, unless otherwise approved by the Director.

27. The Licencee shall dispose of all solid waste generated at the Development, which is not recycled, only to a waste disposal ground operating under the authority of a permit issued pursuant to *Manitoba Regulation 37/2016* respecting *Waste Management Facilities* or any future amendment thereof, or a Licence issued pursuant to *The Environment Act*.

#### **Respecting Dangerous Goods or Hazardous Waste**

28. The Licencee shall not release dangerous goods or hazardous wastes into the wastewater collection system.

29. The Licencee shall comply with all the applicable requirements of:

- a) *The Manitoba Dangerous Goods Handling and Transportation Act*, and regulations issued thereunder, respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development; and
- b) *Manitoba Storage and Handling of Petroleum Products and Allied Products Regulation 188/2001*, or any future amendments thereto.

30. The Licencee shall collect, transport and store used oil or hydraulic fluids removed from on-site machinery in secure, properly labeled, non-leaking containers and shall regularly send them to a recycling or disposal facility approved to accept hazardous wastes.

31. The Licencee shall install and maintain spill recovery equipment at the Development at all times.

#### **Respecting Process Wastewater**

32. The Licencee shall operate and maintain the screening and DAF unit to pre-treat all process wastewater prior to discharging to the IWWTF.

33. The Licencee shall direct all solids from the DAF unit to an off-site rendering facility that is licensed under *The Environment Act* or under the appropriate legislation of another corresponding jurisdiction.

34. The Licencee shall not release any process wastewater or sanitary wastewater from the Development except through the wastewater collection system to the industrial wastewater treatment facility (IWWTF).

## MONITORING AND REPORTING

### Respecting Monitoring

35. The Licencee shall:
- a) monitor, determine and record the number of hogs processed by the end of each week;
  - b) monitor, determine and record the total weekly quantity (cubic meters) of raw water used by the Development; and
  - c) maintain the recorded information in a monthly report and make the report available to the Environment Officer upon request.

### Record Drawings

36. The Licencee shall:
- a) prepare "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 AND REVOCATION

- A. This Licence replaces Environment Act Licence No. 1102 R which is hereby rescinded.
- B. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, 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*.

  
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Tracey Braun, M.Sc.  
Director  
Environment Act