SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOHENT: R3 Innovations Inc. and the Town of Neepawa and HyLife Foods LP
PROPOSAL NAME: Industrial Wastewater Treatment Facility Expansion and Hog Processing Plant Expansion
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment and Meat Processing Plant
CLIENT FILE NO.: 2755.20 and 2754.10

OVERVIEW:

On June 12, 2013, the Department received a Proposal from AECOM on behalf of R3 Innovations Inc. & the Town of Neepawa and HyLife Foods LP for the operation and expansion of the HyLife Foods hog processing plant and the R3 Innovations & Town of Neepawa industrial wastewater treatment facility (IWWTF). Both developments are located in SW 35-14-15WPM in the Town of Neepawa.

The proposed changes to the hog processing plant include an increase in the current production rate of 27,550 hogs per week to 37,500 hogs per week and the addition of a casings and heparin production operation. The increase in wastewater which would result from the increased production rate would be accommodated by the proposed expansion at the IWWTF which treats the wastewater generated at the hog processing plant.

The proposed expansion to the IWWTF includes the construction of an additional aeration tank, an extra blower unit, a third membrane cassette in each existing membrane train and replacement of centrifuge feed pumps. Up to 1200 m³/day of treated wastewater from the IWWTF would be discharged on a continuous basis via the existing effluent outfall pipeline with final discharge to the Whitemud River.

The Department, on August 22, 2013, placed copies of the Proposal in the Public Registries located at the Legislative Library, the Millennium Public Library and the Online Registry at http://www.gov.mb.ca/conservation/eal/registries/index.html. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. The Department placed public notifications of the Proposal in the Neepawa Banner on Friday, August 30, 2013. The newspaper and TAC notifications invited responses until September 30, 2013.

COMMENTS FROM THE PUBLIC:
No comments were received from the public.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Conservation and Water Stewardship – Water Control Works and Drainage Licensing
As the amount of outflow from the R3 Innovations Wastewater Plant into the Whitemud River will increase, the Water Control Works and Drainage Licensing Section requests the following:

- **Written approval from the immediate downstream landowners and the respective Rural Municipalities.**
- **An engineered drainage plan, as per the attached specifications.**
- **All water control works be licensed, as required under the Water Rights Act. Any inquiries in this regard may be directed to the local Water Resource Officer. Their contact information may be found at:** [http://www.gov.mb.ca/conservation/waterstewardship/licensing/pdf/areas_of_focus_jan_23_12.pdf](http://www.gov.mb.ca/conservation/waterstewardship/licensing/pdf/areas_of_focus_jan_23_12.pdf)
- **Licensing of yard and field approaches (access points) are the responsibility of either the municipality, or Manitoba Infrastructure and Transportation, whichever is applicable.**
- **The drainage and/or alteration of permanent and semi-permanent wetlands is not permissible under the Water Rights Act.**

**Proponent Response (November 27, 2013):**

- The license limits that are currently in place for the IWWTF were developed for a discharge scenario of 1,520 m³/day. As no concerns were raised in the public consultation in this regard, and the facility will remain within the existing license limits, it is not anticipated that written approval from downstream landowners or Rural Municipalities is required.
- The proposed building footprint increase at HyLife Foods will occur in areas that are currently compacted or paved. As such, these building expansions are not anticipated to increase the site drainage requirements. It is anticipated that as part of detailed design of the new aeration tank at the IWWTF, site topography and drainage will be considered with final site and structure elevations designed to prevent onsite ponding. Soils at the site are generally coarse grained (primarily sands), therefore, it is not anticipated that significant ponding would normally occur.
- All water control works will be licensed as appropriate.

**Water Control Works and Drainage Licensing – Additional Questions (December 4, 2013):**

- **Will there be any increase in volume or flow rate of wastewater effluent discharged into the environment?**
- **Are there any proposed changes to the discharge area and/or outlet?**

**Proponent Response (December 4, 2013):**

- There will be an increase in the wastewater generated compared to existing conditions, however the discharge levels will remain below the licensed 1520 m³/day. The relative increase is summarized in Table 3 of the NOA document, a commitment indicating that the proposed flows and loads will be generated will continue to be treated within the licensed limits of the IWWTF using the proposed additional treatment infrastructure is listing on page 9 just before Table 3.
- There are no changes proposed to the discharge area/outlet, the proposed IWWTF modifications will occur at the treatment plant area, far from the discharge location.
Water Control Works and Drainage Licensing Response (December 5, 2013):
- Based on this information, we have no concerns.

Disposition:
The Water Control Works and Drainage Licensing Branch is satisfied with the information received and has no concerns.

**Manitoba Health:**

**R3 Innovations:**
- **Air Emissions:**
  Ensure air emissions criteria will be met, including assessing the need for air dispersion monitoring if needed.
  Ensure odour control and monitoring.
- **Water:**
  Ensure containment design provides the best possible groundwater protection for the area.
  Consider ongoing leachate, soil and groundwater monitoring.
  Ensure prevention of pollutants or contaminated wastewaters from entering surface and/or groundwater systems.
- **Waste/Chemicals:**
  Ensure that any discharge of effluent or removal of effluent is in compliance with Manitoba Environment’s guidelines.
  Ensure ongoing reporting and appropriate disposal of all hazardous wastes.
- **Emergency Response Plan/Safety:**
  Ensure availability for review of an emergency response plan.
  Fencing, gates, and warning signs to be included to ensure public safety, in case of unsupervised public access to the development.

**HyLife Foods:**
- **Workplace Safety and Health:**
  Ensure Workplace Safety & Health Standards are applied to ensure the health of the workers at the pork processing plant is protected with the increased proposed development of this plant.
- **Environment/Physical Health of the rural population surrounding this plant:**
  Ensure the physical health of the rural population surrounding this plant is protected by ensuring the points listed above regarding File: 2755.20 are acknowledged.
- **Social Implications**
  Social implications associated with the pork processing plant would be valuable to assess in order for harmonious relationships to be fostered between the surrounding rural community (including the workers at the plant) and the processing plant. It is important to manage the perceptions and concerns of the public and workers regarding the processing plant. As well, it is important that social integration of the plant (with the upcoming expansions) be enhanced by creating and maintaining a variety of links between the plant and the rural community.
Proponent Response (November 27, 2013):

- HyLife Foods and R3 Innovations Inc. will continue to comply with their facility’s operating licenses (CEC Order No. 1102 and Environment Act Licence 2870) including any licence clauses related to odours or emissions.

- The construction methods and standards for the proposed upgrades will be similar to those employed previously at the R3 Innovations plant and ensure that groundwater continues to be properly protected. HyLife Foods and R3 Innovations Inc. will continue to abide by the requirements of their Environment Act Licenses and any amendments thereto as per agreements with Manitoba Conservation and Water Stewardship.

- Waste/chemicals are discharged and dealt with in full compliance with the appropriate regulations.

- An Emergency Response Plan has been developed for both HyLife Foods and R3 Innovations Inc. IWWTF and is updated on an as needed basis as new developments arise. HyLife Foods has perimeter fencing and both HyLife Foods and the IWWTF have appropriate safety signage within the facilities.

- Workplace health and safety is of paramount concern to HyLife Foods and is a priority in all activities at the facility. Operations at HyLife Foods are regulated under a number of health and safety regulations including the Manitoba Workplace Safety and Health Act and Regulations. As a result of HyLife Foods continued commitment to injury prevention we have consistently reduced our Workers Compensation Board (WCB) premiums since HyLife Foods has taken over the Springhill plant.

- HyLife Foods and R3 Innovations Inc. are committed to ensuring compliance with their facility’s operating licenses (CEC Order No. 1102 and Environment Act Licence 2870). These licenses are in place to protect the environment and public health.

- HyLife Foods has always maintained an open door policy for area residents to voice concerns and issues related to the operations at the facility. To date, no issues have prevailed through the five plus years of HyLife operations at the facility. HyLife Foods works closely with the Neepawa and Area Development Corporation (NADCO), Neepawa and Area Immigrant Settlement Services, and the Neepawa Chamber of Commerce, and has representatives on all these committees/boards to listen and speak to the concerns of the communities we operate within. One of our most successful initiatives was establishing the Immigrant Settlement office in Neepawa which we have partnered with to ensure the successful integration of over 700 immigrant workers, many of which have brought in family members thereby increasing the population of Neepawa by over 1,000. As a result of this successful integration, in 2009 HyLife Foods (called Springhill Farms at the time) was presented by the province of Manitoba with the “Capturing Opportunities” Economic Development Innovation – Corporate Award. This award recognizes corporate partners that engage community organizations or individuals in cooperative projects that contribute to the community economic development of a community and/or region.

Disposition:
No further response was received from Manitoba Health, which is assumed to indicate that they are satisfied with the information received and have no concerns.
Office of the Fire Commissioner (OFC):

- With respect to the proposed expansion and operation of the HyLife Foods processing plant, if there is any planned addition to the building floor area to accommodate this expansion, the Office of the Fire Commissioner (OFC) recommends that Building and Occupancy Permits be obtained from the authority having jurisdiction, that being the OFC located at 1601 Van Horne Avenue East, Brandon.

- With respect to the expansion and operation of the R3 Innovations WWTF, the Office of the Fire commissioner has no comments at this time.

Proponent Response (November 27, 2013):

- Additions to the HyLife Foods building footprint will take into account the appropriate building occupancy permitting regulations.

Disposition:

No further response was received from the Office of the Fire Commissioner, which is assumed to indicate that they are satisfied with the information received and have no concerns.

Conservation and Water Stewardship – Environmental Compliance and Enforcement

- R3 Innovations in conjunction with HyLife Foods Pork Processing Facility should only have one point source of discharge to the Whitemud River. Therefore, all effluent generated at HyLife Foods Pork Processing Facility should be treated and discharged through the Industrial Wastewater Treatment Plant thereby ensuring proper treatment within the scope of the original proposal.

- No effluent is to be diverted to the Town of Neepawa Municipal Lagoon as the Town of Neepawa requires the full capacity of their facility to service the Town of Neepawa.

- It should also be noted that the Clean Environment Commission Licence for the former Industrial Wastewater Treatment Lagoons should be reviewed and amended in order to indicate its current and future operations. HyLife has indicated they wish to utilize the former facility at times when the IWWTF may be down. Should that be the case a NoA should be provided to ensure the intended use meets the requirements of the licence. Also, there are components of the existing facility which are not functional/operational at this time and therefore use of the facility in its current state may not meet licence conditions.

Proponent Response (November 27, 2013):

- Under normal operating conditions, all effluent produced at the HyLife Foods facility will be treated at the R3 Innovations Inc. IWWTF. In rare cases, process upsets may occur for a variety of reasons that may affect the treatment at the IWWTF. In the event that pre-discharge monitoring/testing indicates that treated effluent quality does not meet Environment Act Licence conditions, R3 Innovations Inc. will temporarily divert the effluent to the former IWWTF cells (as is current practice). This wastewater will be tested for compliance with Environment Act Licence conditions and will be either discharged to the Whitemud River via the same existing outfall (if license conditions are met) or fed back into the IWWTF for additional treatment and discharge via the outfall. In any case where this
contingency must be enacted, R3 Innovations will have an approved plan in place with Manitoba Conservation and Water Stewardship for the emergency use of the former IWWTF cells or the Town of Neepawa Municipal Lagoon if required by the license.

Disposition:
The draft Licence includes clauses which address the concerns of the Environmental Compliance and Enforcement Branch.

Conservation and Water Stewardship – Watershed and Protected Areas Branch and Lands Branch
• No concerns.

Conservation and Water Stewardship – Water Quality Management Section
• The following effluent standards should be in place for HyLife Foods Pork Processing Facility and R3 Innovations Inc/Town of Neepawa IWWTF as per the Manitoba Water Quality Standards, Objectives and Guidelines Regulation (196/2011):
  • BOD5 25 mg/L
  • Total suspended solids 25 mg/L
  • Fecal Coliforms or Escherichia coli 200 MPN / 100mL
  • Total Nitrogen 15 mg/L
  • Total Phosphorus 1 mg/L
• The Manitoba Water Quality Standards, Objectives and Guidelines Regulation (196/2011) requires facilities that discharge continuously to meet a site specific guideline for total ammonia.
• The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director.

Proponent Response (November 27, 2013):
• Comments noted. The R3 Innovations Inc. IWWTF will continue to maintain compliance within limits as detailed in Environment Act Licence 2870.
• The Environmental Impact Assessment conducted for the construction of the R3 Innovations Inc. IWWTF included an assessment of ammonia discharge to the Whitemud River and consideration of the potential cumulative effects of the IWWTF discharge and the Town of Neepawa municipal lagoon discharge. The assessment found that the new IWWTF would reduce ammonia discharge rates with average fully mixed effluent concentration being well below the lowest Manitoba Surface Water Quality Objective for protection of cool-water aquatic life.
• HyLife Foods and R3 Innovations will participate in future watershed management studies if required as part of Environment Act Licence 2870.

Disposition:
Wastewater effluent quality limits, including ammonia limits, have been included in the draft Licence in accordance with the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation (196/2011)*.

A clause requiring the proponent to actively participate in any future watershed and/or aquifer based management study, plan and/or nutrient reduction program is included in the draft Licence.

**Conservation and Water Stewardship – Office of Drinking Water**
- The potable water supply for the processing plant, coming from the Town of Neepawa public water system, will need to be protected from cross contamination as called for in The Manitoba Plumbing Code.
- ODW has no other concerns with this EAP.

**Proponent Response (November 27, 2013):**
- The appropriate backflow/backsiphonage infrastructure is already in place at the HyLife Foods facility to appropriately protect the drinking water supply system and will continue to be used with the proposed alterations at the facility.
- The appropriate backflow/backsiphonage infrastructure is already in place at the IWWTF to appropriately protect the drinking water supply system and will continue to be used with the proposed alterations at the facility.

**Conservation and Water Stewardship – Office of Drinking Water Response (December 12, 2013):**
- The responses satisfactorily answer my concerns noted in the original EAPs respecting backflow prevention and I have no other concerns with these EAPs or developments.

**Disposition:**
The Office of Drinking Water is satisfied with the information received and has no further concerns.

**Conservation and Water Stewardship – Parks and Natural Areas Branch**
- No comments to offer as this does not impact any parks or ecological reserves.

**Conservation and Water Stewardship – Water Use Licensing**
- No concerns

**Conservation and Water Stewardship – Fisheries Branch**
- Fisheries Branch has reviewed this combined proposal for the construction and operation of upgrades to the existing HyLife Foods pork processing facility (increase production from 25,550 hogs/week to 37,500 hogs/week) and the expansion and operation of the R3 Innovations/Town of Neepawa IWWTF located in SW 35-14-15 W required to meet the increased processing demands. The proposed changes to the IWWTF development include the construction of an additional aeration tank, an extra
blower unit, a third membrane cassette in each existing membrane train and replacement of centrifuge feed pumps. Up to 1200 m³/day of treated wastewater from the IWWTF would be discharged on a continuous basis via the existing effluent outfall pipeline into a low lying area with final discharge to the Whitemud River.

- All wastewater from the pork processing operations as well as the sanitary services, hog receiving facility and on site truck wash is treated at the IWWTF. The proponent has indicated to date that they have been able to meet the effluent treatment requirements stipulated under their existing licence and will be able to do so under the expansion.

- While we do not have any direct fisheries concerns with the proposed facility expansion we could have concerns with increased volume of effluent and effluent quality. The Whitemud River does provide year round habitat for a number of small and large bodied species. It is very important that the effluent meet or exceed the Manitoba Water Quality Standards, Objectives and Guidelines. While we defer to our colleagues in Water Quality Management with respect to what parameters and monitoring requirements the proponent should adhere to we do need more information with respect to effluent temperature.

- One of the tables indicates that the effluent temperature is 25-30°C. Is this the discharge temperature? The proposal indicates that the effluent is not discharged directly into the Whitemud River but into a low lying area adjacent to the Whitemud River. There is no indication of how long that effluent is retained in the low lying area before it reaches the river and if the temperature of the effluent has changed at the point it enters the river. Has there been any comparison to background water temperatures and has there been any delineation of the plume based on temperature downstream of the discharge area? Depending on the information provided there may be the need to include a temperature requirement in the license but we would discuss this with Water Science Management once additional information has been provided.

- Although construction works should not affect the Whitemud River we would still request that there be a licence condition that requires the proponent to implement erosion and sediment control measures as per clause 9 of the existing licence. Similarly the clause that addresses the application of biosolids, with respect to land application and minimum distances from surface water (clause 33 d, e and f) should also be included.

Proponent Response (November 27, 2013):

- The anticipated increase in treated effluent volume will remain within the licensed treatment capacity of the R3 Innovations Inc. IWWTF (IWWTF) of 1,520 m³/day. No increase in treated effluent discharge beyond the licensed limit is proposed. The license limits that are currently in place for the IWWTF were developed for a discharge scenario of 1,520 m³/day. Table 4 in the Environment Act Proposal report provides an overview of the influent flows and loads to the IWWTF. As shown in the table, the influent temperature to the IWWTF ranges from 25-30°C. Please note, that the influent temperature is not the effluent temperature discharged to the Whitemud River. As indicated in Section 2.3.1.6 of the Environment Act Proposal report, after undergoing treatment at the IWWTF, treated wastewater flows to a cooling process that includes a cascade type system that also provides aeration of the effluent at ambient temperatures. From the cooling process, treated effluent
flows by gravity to an effluent outfall that eventually discharges to a low lying area near the Whitemud River.

- Erosion and sediment control measures were described in Section 5.5.1.2 of the Environment Act Proposal Report. The proponent is committed to the implementation of these mitigation measures and will ensure they are enacted during the construction stage of the development.

- As outlined in Sections 1.2.2, 2.3.1.7 and 2.6.2.2 of the Environment Act Proposal report, sludge generated at the IWWTF is transferred to a third party facility near Winnipeg, Manitoba for composting. The alteration to the sludge management program was approved by Manitoba Conservation (now Manitoba Conservation and Water Stewardship) as a minor alteration on November 18, 2009.

Disposition:
No further response was received from the Fisheries Branch, which is assumed to indicate that they are satisfied with the information received and have no concerns.

Infrastructure and Transportation – Highway Planning and Design Branch
- No concerns with the development as proposed.

Manitoba Agriculture, Food and Rural Initiatives
- No concerns.

Canadian Environmental Assessment Agency
- No comments were received

PUBLIC HEARING:
No public concerns were received during the public review period of the environmental assessment and licensing process. A public hearing was not requested by the public and is not recommended for this Development.

CROWN-ABORIGINAL CONSULTATION:
The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

Aboriginal consultation was not required for the proposed expansions as the facilities are existing Developments currently in operation on privately owned land.

RECOMMENDATION:
The Proponents should be issued Licences for the expansion and operation of the Developments, being the R3 Innovations Inc. and the Town of Neepawa Industrial Wastewater Treatment
Facility and the HyLife Foods LP Hog Processing Plant in accordance with the specifications, terms and conditions of the attached draft Licences. Enforcement of each Licence should be assigned to the Environmental Compliance and Enforcement Branch.

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November 26, 2014
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