



TECHNICAL REVIEW COMMITTEE
A TECHNICAL REVIEW REPORT
PREPARED FOR

THE MUNICIPALITY
OF

KILLARNEY–TURTLE MOUNTAIN

HYLIFE LTD. – TUSCANY

S^{1/2} of SE^{1/4} 12-1-18 WPM

TRC 12–034

March 9, 2018

A. INTRODUCTION – THE TEAM

The Technical Review Committee (TRC) is supported by the following department personnel:

- Agriculture (Ag); Livestock Environment, Nutrient Management and Business Development Specialists, Agricultural Engineer, and Veterinarians
- Municipal Relations (MR); Community Planners
- Infrastructure (MI); Development Review Technologists, Engineering and Operations Division; Development Review Officers, Water Management and Structures Division
- Sustainable Development (SD); Technical Review Officer, Soils Specialist, Environmental Engineer, Environment Officer, Habitat Mitigation Biologist, Regional Wildlife Manager, Nutrient Management Regulation Supervisor, Groundwater Specialist, Water Rights Licensing Manager and Resource Planner
and
- Any other specialist or department that may have an interest, which may be consulted during the process.

The Technical Review Coordinator, (Senior Planner, MR) chairs the committee.

THE REPORT (TRC Process Box 17)

Prime Purpose of TRC Reports

To provide objective, highly credible, technically-based assessments that:

- a) Enable municipal councils to make informed Conditional Use Permit decisions;
- b) Create a common stakeholder understanding of a livestock proposal, potential impacts and related regulatory requirements and safeguards;
- c) Provide a vehicle/forum that enables the sharing of public concerns and proponent responses;
- d) Offer recommendations to both municipal councils and proponents; and
- e) Represents the fulfillment of the TRC's role as per 116(1)(b)(i) of The Planning Act – to determine, based on available information, that the

proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards

Should the Municipal Council provide conditional approval of the proposal, the project proponent may be required to obtain various permits and licenses from the Province to address in greater detail environmental aspects of the proposal.

THE PROCESS

The TRC Process Chart with actual pertinent dates and brief overview is shown below.

The Technical Review Process: TRC-12-034 – HyLife Ltd. – Tuscany



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to:

www.gov.mb.ca/ia/programs/livestock/public_registries.html

Applicant: HyLife Ltd. – Tuscany

Site Location: Approximately 16 miles (25.7 km) SW of Killarney, and approximately one-mile (1.6 km) north of the Canada - USA border at S½ of SE¼ 12-1-18 WPM (refer to maps below).

Proposal: To establish a new 4 barn 10,000 head, hog finisher operation consisting of 1430 Animal Units (AU) in an Animal Confinement Facility.

This will involve the following:

- Construction of 4 new feeder barns each housing 2500 hogs
- Construction of a multi-cell engineered earthen manure storage facility, with 400-day capacity
- Construction of an office building
- Consuming 33,000 imperial gallons of water per day from a proposed well
- Rendering mortalities (no composting site)
- Shelterbelt Planting of 3 rows around developed site
- Using the truck haul routes as shown below

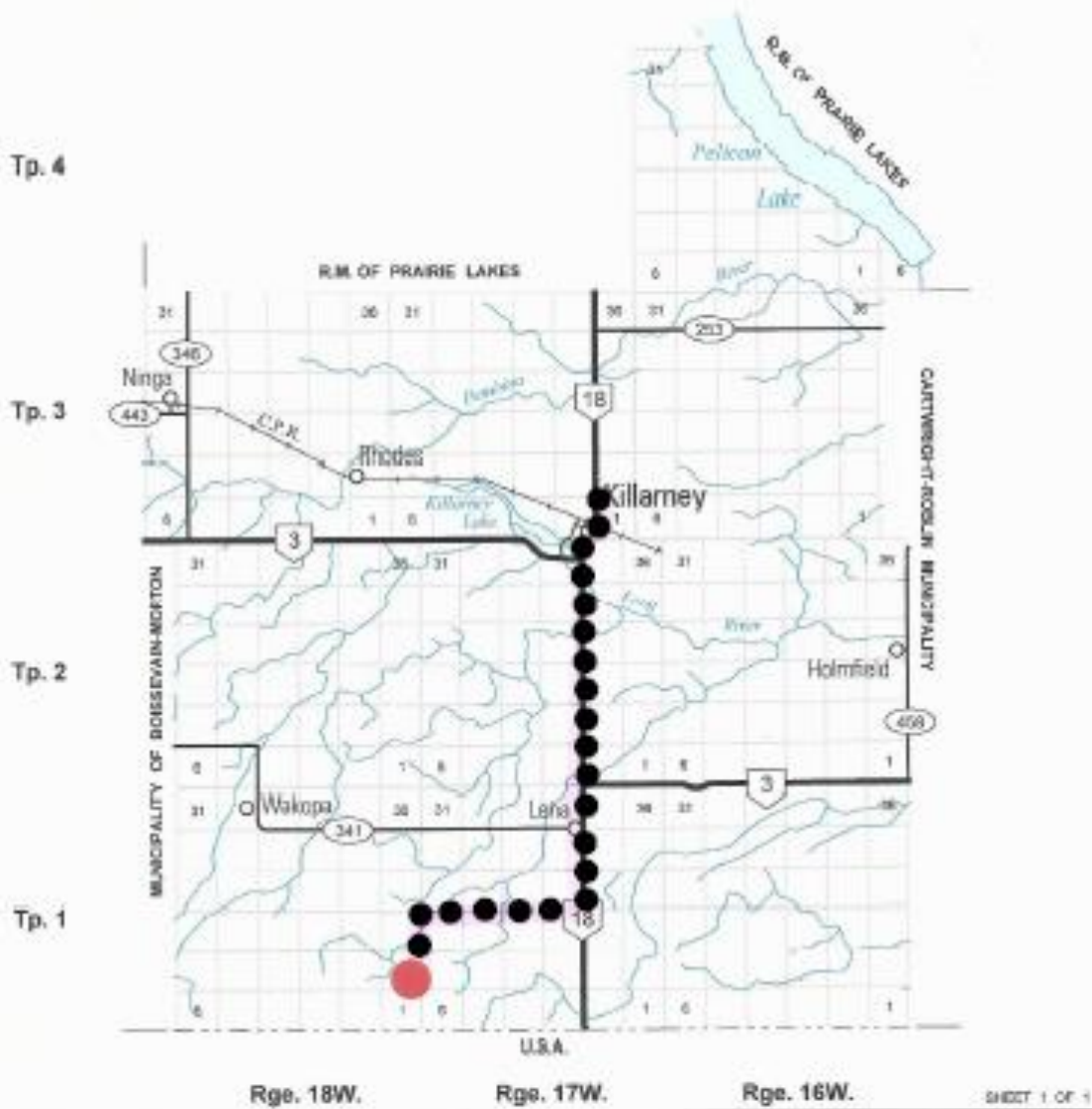
R.M. OF KILLARNEY- TURTLE MOUNTAIN



PROVINCE OF MANITOBA
INFRASTRUCTURE
HIGHWAY PLANNING AND DESIGN BRANCH
GEOGRAPHIC & RECORDS MANAGEMENT SECTION
WINNIPEG
JANUARY 1, 2018

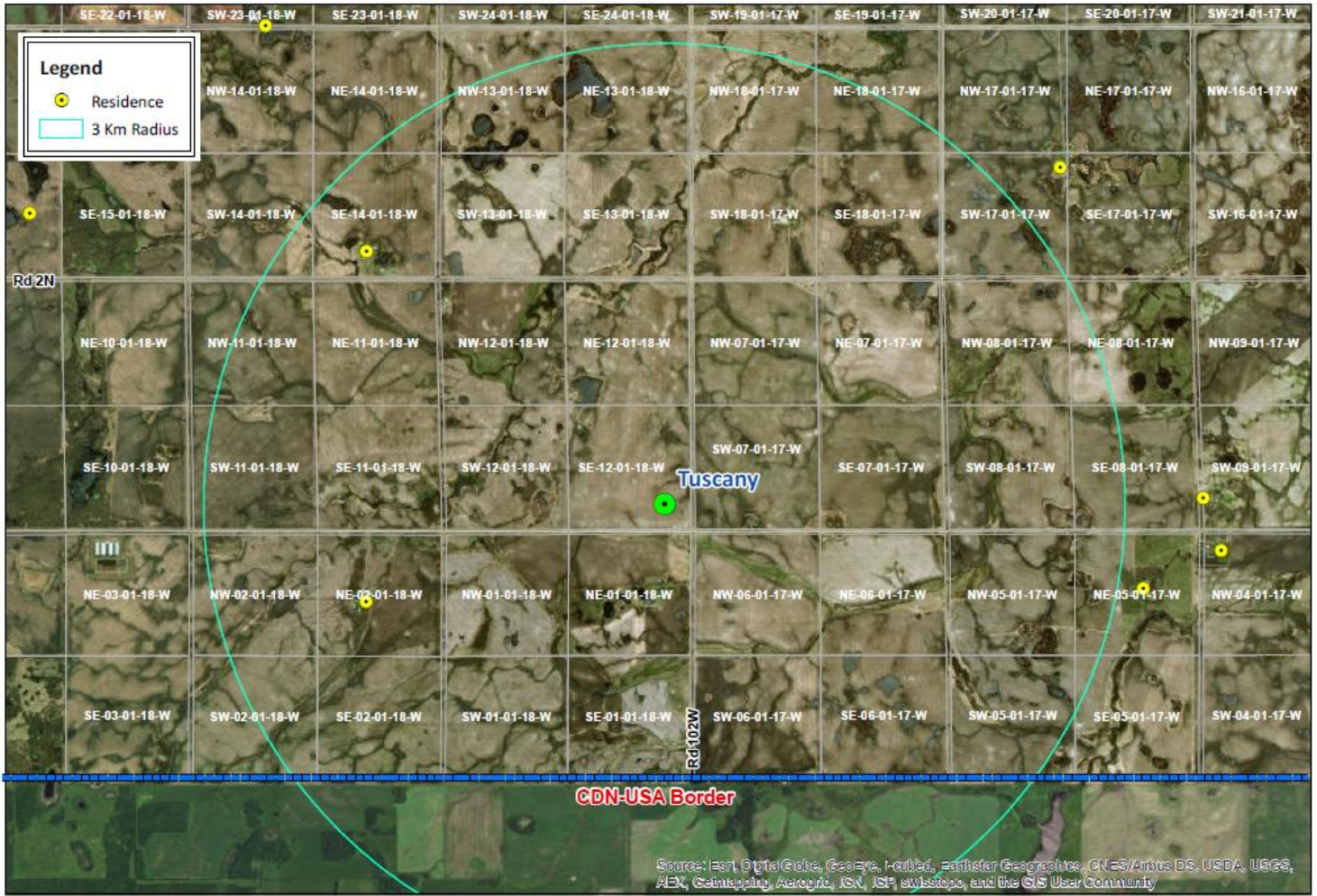
LEGEND

PROVINCIAL TRUNK HIGHWAYS		TRUCK	
PROVINCIAL ROADS		ACCESS ROADS	
		RAILWAYS	



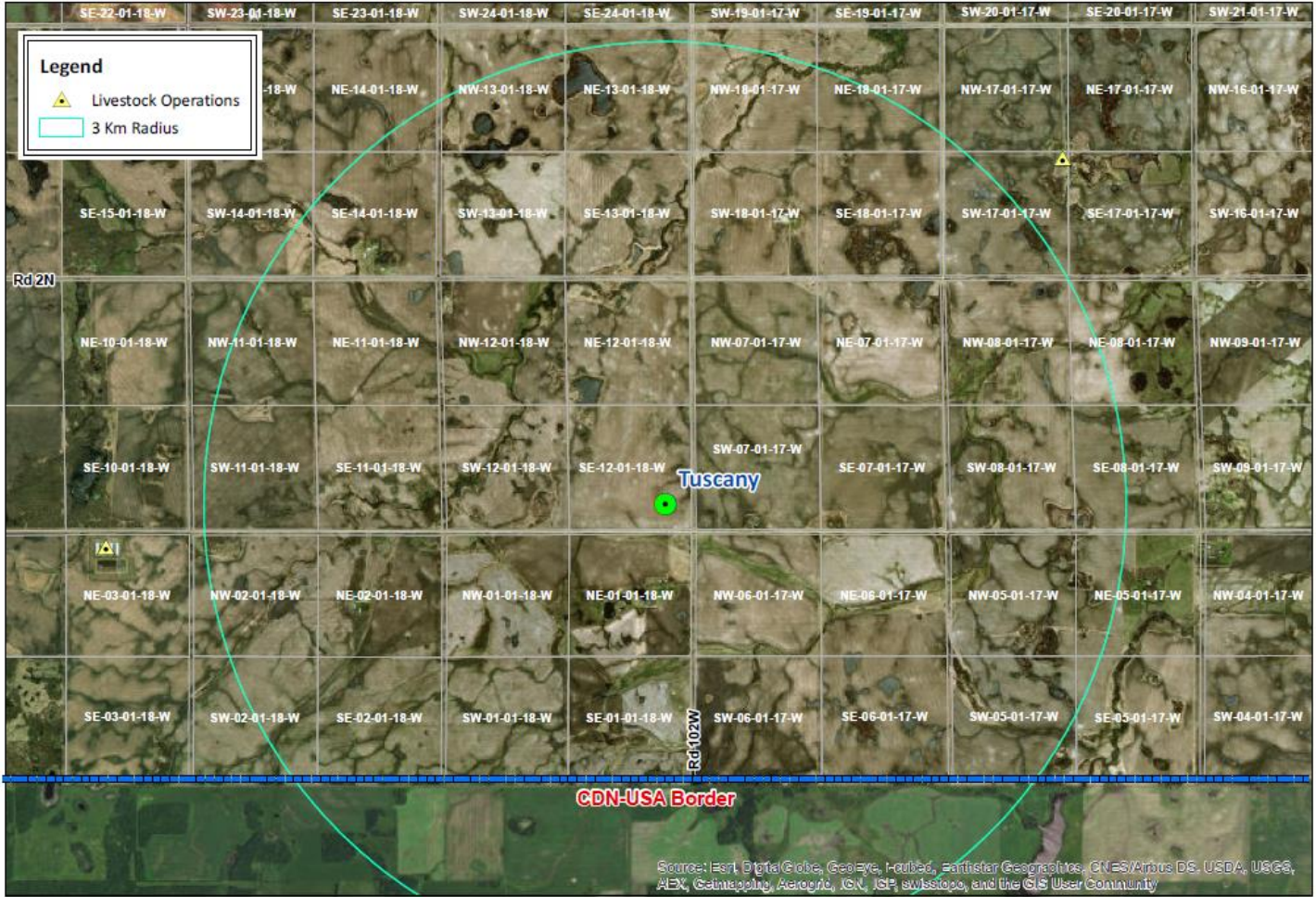
SHEET 1 OF 1

Tuscany [SE-12-01-18W] - Residence within 3 KM



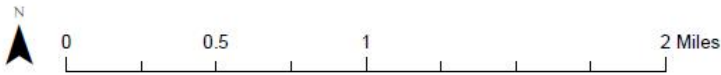

 Prepared by:
 Matt Reimer
 Manager of Agronomic Services
 Hylife Ltd.

Tuscany [SE-12-01-18W] - Livestock Operations within 3 KM



Prepared by:
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 Manager of Agronomic Services
 Hylife Ltd.

Tuscany [SE-12-01-18W] - Spread Acres



Prepared by:
 Matt Reimer
 Manager of Agronomic Services
 HyLife Ltd.

C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of TRC 12-034 – HyLife Ltd. - Tuscany			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
1. Submitted complete Site Assessment	X	The proposal is consistent with the Provincial requirements for a Livestock Operation.	MR
2. Clearly defined the project as an Animal Confinement Facility	X	Given that each proposed barn is in excess of 6,458 sq. ft. each will require a building permit from the Fire Commissioner's Office	MR
3. Proposed Project Site Physical Suitability	X	According to detailed (1:50,000) soil survey, the HyLife Ltd – Tuscany yard site will be located on prime agricultural land. The proposal includes a new earthen manure storage structure. The construction, modification or expansion of any manure storage facility requires a permit from Manitoba Sustainable Development. The permit must be obtained before construction begins.	Ag
4. Proposed Project Site Flood Risk Potential	X	Water Management, Planning and Standards is not aware of any major overland flood hazard at this location.	MI
5. Identified 33,000 imperial gallons of water per day required for proposed operation	X	Operations with >5,499 imperial gallons require a Water Rights License. More information, including the SD contact information is provided in Section 7.4 of the site assessment	SD
6. Proposed measures to meet storage and application regulations for manure	X	Any applicable permit or annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. The proposed operation would be required to register annual manure management plans. Manure management plans are reviewed by Branch staff for regulatory compliance at the time of submission. As soil nutrients change over time, SD staff have not dedicated resources to review the spreadfield	SD

Provincial Technical Overview of TRC 12-034 – HyLife Ltd. - Tuscany

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
		information and soil tests in this site assessment. However, soil analysis reports are included in the manure management plans. Additional details on the required information for manure management plans, including mandatory sampling depth, soil analysis and completing the form are provided at: http://www.gov.mb.ca/sd/envprograms/livestock .	
7. Proposed Project Site with suitable mortalities disposal methods (rendering)	X	Information on disposal is provided in section 9 of the site assessment, which requires the proponent to select from 4 acceptable methods of disposal. More specific information is included in the Livestock Manure and Mortalities Management Regulation and at http://www.gov.mb.ca/sd/envprograms/livestock .	SD
8. Proposed Project Site with acceptable odour control measures	X	The proponent has indicated that shelterbelts will be established. Should odour become a problem for neighbouring residents, there is a complaints process under The Farm Practices Protection Act. A person who is disturbed by any odour, noise, dust, smoke or other disturbance resulting from an agricultural operation may make a complaint, in writing, to the Manitoba Farm Industry Board. The Act is intended to provide for a quicker, less expensive and more effective way than lawsuits to resolve nuisance complaints about farm practices. It may create an understanding of the nature and circumstances of an agricultural operation, as well as bring about changes to the mutual benefit of all concerned, without the confrontation and the expense of the courts.	Ag
9. Proposed Project Site that meets development plan and zoning by-law requirements	X	<u>Killarney-Turtle Mountain Development Plan By-law No. 25-2008</u> , as amended - SE1/4 Sec.12-01-18WPM – lands designated “RURAL AREA. <u>Killarney-Turtle Mountain Zoning By-law No. 2-2016</u> - SE1/4 Sec. 12-01-18WPM – lands zoned “AG” Agricultural General Zone. L.O’s 231AU and larger = conditional use. Proposed facilities meet minimum zoning by-law mutual setback requirements between animal housing facility / earthen manure storage facility and nearest unrelated single dwelling and designated area. A validated <u>Development Permit / Building Permit and Conditional Use Oder</u> must be obtained from The Municipality of Killarney-Turtle Mountain prior to commencement of construction.	MR
10. Proposed Project Site that is a	X	Distances to these features is provided in section 10.5 of the site assessment. Where the distances exceed 1 mile, the department generally has no objection.	SD

Provincial Technical Overview of TRC 12-034 – HyLife Ltd. - Tuscany

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.			
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	<p>HyLife Ltd - Tuscany has met the land requirement for 10,000 grower-finisher pigs, as follows: In areas of lower livestock intensity such as the RM of Killarney-Turtle Mountain, it is currently the Province of Manitoba’s policy to require sufficient suitable land for all of the nitrogen and half of the phosphorus generated by the livestock. This policy assumes that more land is available and could be brought into the HyLife Ltd - Tuscany manure management plan to balance phosphorus with crop removal, should it be necessary in the future. In order to determine the land requirements for HyLife Ltd - Tuscany, nitrogen and phosphorus excretion by 10,000 grower-finisher pigs is compared to nitrogen utilization and phosphorus removal by the proposed crops to be grown. The calculation takes into consideration typical, modern feeding practices for pig production and realistic, long-term 7 to 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Killarney-Turtle Mountain. Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the lands with soil tests were below 60 ppm Olsen P, as required to be considered suitable. Detailed soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is predominantly Class 2 and 3 (prime agricultural land) with depressional areas being Class 5. The limitations include slope (T), lack of moisture (M), inundation (I) and wetness (W). Although manure application is permitted on Class 5 soils, mapped areas of Class 5 soils have been excluded from land base in this proposal. HyLife Ltd - Tuscany is required to demonstrate that they have access to at least 2024 acres of suitable land for manure application. They have demonstrated that they have access to 2532 suitable acres for manure application.</p>	Ag
12. Proposed Spreadfields with sufficient minimum setbacks on	X	The proponent is required to demonstrate minimum setback distances listed in section 10.6 of the site assessment.	SD

Provincial Technical Overview of TRC 12-034 – HyLife Ltd. - Tuscany

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
Spreadfields from natural features (water sources etc.)			
13. Proposed Spreadfields with sufficient minimum setbacks on spread fields from natural features (water sources etc)	X	Section 8.7 requires the proponent to indicate if all setbacks have been observed from and excluded from land base calculations.	SD
14. Proposed Spreadfields that have been secured by spread agreements	X	All of the land for manure application is under agreement with local crop producers.	Ag
15. Proposed Spreadfields that meet development plan and zoning by-law requirements	X	All lands identified for manure spreading are designated "RURAL AREA" and zoned "AG" Agricultural General Zone. Said land use designation and municipal zoning district (above) allow spreading of manure associated with newly siting and/or expanding livestock operations.	MR
16. Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	X	The proposed truck route will utilize existing municipal/Government Road Allowances with an existing Government Road Allowance access connection onto PTH 18. Manure spreading: please note that any structures placed within the controlled area of PTH 18 (125 feet from the edge of the right-of-way) requires a permit from the Highway Traffic Board. Please phone (204) 945-8912 for information regarding any such permits. The placement of temporary draglines or any other temporary machinery/equipment for manure application within the right-of-way of PTH 18 requires permission from our regional office in Brandon. Please contact the Regional Planning Technologist (Brian Hickman) at (204) 726-6822. In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PTH 18 (125 feet from the edge of the right-of-way). Manure spreading: please note that any structures placed within the controlled area of PR 341 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 945-3457. The placement of temporary draglines or any other temporary	MI

Provincial Technical Overview of TRC 12-034 – HyLife Ltd. - Tuscany

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
		machinery/equipment for manure application within the right-of-way of PR 341 requires permission from our regional office in Brandon. Please contact the Regional Planning Technologist (Brian Hickman) at (204) 726-6822. In addition, please notify the Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 341 (125 feet from the edge of the right-of-way).	
17. Proposed trucking routes – local roads	X	Municipal roads used north and then east of livestock operation to PTH No. 18 North to Killarney.	MR
18. Declared Provincial Waterways	X	Not within the vicinity of Provincial Waterways. Provincial Waterway Authorization not required.	MI

Provincial Departments

- Ag – Agriculture
- MR –Municipal Relations
- MI – Infrastructure
- SD – Sustainable Development

D. PUBLIC COMMENTS & DISPOSITIONS

Public Comment Summary	
<p>1. Dennis & Jacquie Kowal and Family NE 30-1-17 W</p>	<p>Concerns</p> <ul style="list-style-type: none"> -50,000 pigs in close proximity to our home of 17 years. -We have renovated our home at considerable costs for our 2 sons who have muscular dystrophy, we can't just pick up and move when the pigs stink. -We don't want our surroundings to give us reason for trying to change our lifestyle to get away from the pigs. -Concerned with smell/odour, water quality, manure dumping, basically at our back door and heavier traffic, -We pay very high taxes and have never complained because we value our surroundings. -All four of these hog operations will be in our area, the closest barn will be half a mile from us. It would be very sad to have this barn (Napa – TRC 12-036) built as it would be far too close to us. We plead to you to stop the construction of all barns but this one is far too close.
<p>6. Harry Krahn SE 16-1-17 W</p>	<p>Concerns</p> <ul style="list-style-type: none"> -with proposed hog operations TRC 12-034, TRC 12-035 and TRC 12-036; -At my location on SE 16-1-17W, I would be surrounded by barns. -With this proposal there would be almost no relief from hog odour, no matter what direction the wind blows from. -With retirement on the horizon I feel this could lead to lower land values for selling or possibly no one wanting to live here at all. -Concern with amount of water such a large number of hogs would use, putting pressure on our water supply. -I run a cattle operation myself and water is quite important. -With the hog operations already in existence nearby, these new proposals would make it too concentrated an area.
<p>7. Kevin Hill SE 15-1-17</p>	<p>Opposed</p> <ul style="list-style-type: none"> -I can see positive economic impact for our community. In addition, as someone connected to our Ag industry I can also see the positive impact it has for our area farmers by way of fertilizer. - The issue I have is slamming our community south of Killarney, and even south of Lena with barns. We have what I would consider is a decently populated area down here. I just don't see the sense in putting so many barns in a populated area.

	<p>-As a property owner I'm also concerned about it reducing my home's value due to odour and unsightly barns.</p> <p>- I know that HyLife says that they address those issues, but I haven't seen that done in what I would consider a satisfactory manner on other existing sites.</p> <p>- I find myself frustrated to find out that plans and land has been acquired for these barns with little public knowledge. It leaves me feeling that we get these barns no matter what because the land has already been purchased.</p> <p>-Most of my neighbours are at the point of saying enough is enough, no more barns around us, let's do a better job of spreading them out.</p> <p>- That's what my biggest opposition to these barns is, why in such a concentrated area?</p> <p>-Please consider my email as a voice opposed to the current plan.</p> <p>- As I understand it I'd have two to three barns going up in what I consider way to close of proximity to my home which is located in the SE 15-1-17. Thank you for taking the time to hear my arguments.</p>
<p>8. Clint Fleming</p>	<p>Concerns</p> <p>-I am a barn owner and have no problem with more barns being built in my area.</p> <p>- My only concern is how close to a road they might be built. The sight for Tuscany is near the intersection of Jauques Road and Blixhavn Road. This area is prone to drifting throughout the winter. Whether or not a building near the road would make this worse, I don't know. I do know we get some large drifts off the corners of our barns most years.</p> <p>-I also think some set back from the road would help to minimize complaints. People driving by just meters away from the fans will definitely notice the smell and the only place for a dead stock bin will be near the road. This kind of close encounter can create some negative responses from people.</p> <p>-Lastly, all barns have lots of truck traffic. Feed trucks and stock trucks. Barns built to close to the road do not have enough room for large trucks to maneuver. A barn near my place has little room for trucks in front of it, so they end up staging on the road when more than one shows up at the same time. They also back up off the road onto the barn lane to get to the load out ramp. This can create hazards for other drivers on the road.</p> <p>I hope this email made it in before the dead line. I know I am cutting it close.</p>

Public Comments in their entirety may be viewed at the following link on the Public Registry:

<http://www.gov.mb.ca/mr/livestock/trc-12-034.html>

E. CONCLUSIONS & RECOMMENDATIONS

Overall Conclusion

The information contained in the Site Assessment submitted by the proponent generally meets Provincial requirements. In addition, based on available information it has been determined that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards.

Recommended Actions to Council

- As per Section 114(1) of The Planning Act, Council must set a date for a Conditional Use hearing which must be at least 30 days after it receives this report
- As per Section 114(2) of The Planning Act, at least 14 days before the date of the hearing, Council must:
 - a) send notice of the hearing to
 - (1) the applicant,
 - (2) the minister, (c/o the Brandon Community & Regional Planning Office)
 - (3) all adjacent planning districts and municipalities, and
 - (4) every owner of property located within three kilometres of the site of the proposed livestock operation, even if the property is located outside the boundaries of the planning district or municipality;
 - b) publish the notice of hearing in one issue of a newspaper with a general circulation in the planning district or municipality; and
 - c) post a copy of the notice of hearing on the affected property in accordance with Section 170 of The Planning Act.
- Council should specify the type(s) of operation, legal land location, number of animals in each livestock category and total animal units in its Conditional Use Order.
- As per Section 117 of The Planning Act, Council must send a copy of its (Conditional Use Order) to
 - a) the applicant;
 - b) the minister (c/o the Brandon Community & Regional Planning Office); and
 - c) every person who made representation at the hearing.

Council is welcome to contact Manitoba Sustainable Development's Technical Review Officer with Environmental Approvals Branch as well as regional Environmental Compliance and Enforcement staff to discuss environmental compliance issues, if applicable, with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98).

Recommended Actions to Proponent

That any additional measures identified through subsequent Provincial and Federal licensing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title	Telephone
Don Malinowski Chair	Municipal Relations	Senior Planner Community & Regional Planning Branch	945-8353
Petra Loro	Agriculture	Livestock Environment Specialist Agri-Resource Branch	945-3869
Jen Webb	Sustainable Development	Manager Environmental Approvals Branch	945-8541
Jeff DiNella	Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	945-2664

Appendix

- The Proponent's Response to Public Comments Submitted.



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March 2, 2018

Manitoba Indigenous and Municipal Relations,
Room 604 - 800 Portage Avenue,
Winnipeg, MB, R3G 0N4

Attn: Don Malinowski, TRC Coordinator

Re: File Nos. TRC -12-034 (TUSCANY)

HyLife would like to acknowledge the concerns raised by the residents of the four households in the Municipality of Killarney-Turtle Mountain regarding our proposed Tuscany HyLife pork production operation on S1/2 of SE-12-1-18W. We respect their views and thank them for their time to comment in the Technical Review Committee's (TRC) public review process. In acknowledgement of the potential for public concerns related to this and other proposed developments in the Killarney-Turtle Mountain municipality, HyLife hosted an open house to inform the public of our proposed growth in the area. We felt it important to reach out to the general public prior to making any formal application to the Province to better understand the concerns of local residents.

HyLife - Our Company and our Proposed TUSCANY Project

Our company's Manitoba roots date back to some 23 years when two farm families, Janzen and Vielfaure joined together to form what is now HyLife. Today, we are a vertically integrated pork producer that is headquartered in La Broquerie, Manitoba. The majority of our farm and associated operations are located in rural Manitoba.

We manage our integrated operations from "Farms to Foods" within 2 divisions. Our HyLife Farms operations oversee the raising of hogs, including genetics and production, manufacturing and supply of feed, transportation, manure nutrient management and support services. Our HyLife Foods operation oversees the manufacturing, marketing and distribution of quality pork products to both domestic and international markets.

HyLife has been in the Killarney-Turtle Mountain Municipality since 2003. We own and operate pork production operations as well as numerous contract operations in the Municipality and our new feed mill in Killarney. When complete, this new feed mill will add 20 new full time jobs and would have the capacity to provide feed services to the proposed Tuscany pork production operation. Tuscany would, in turn, create an additional 2.5 full time jobs.



Government Regulations, Monitoring & Enforcement

In Manitoba, a livestock producer must meet stringent development requirements and undergo a rigorous and complex development review and approval process. This process includes a mandatory provincial government technical review, public reviews, a formal public hearing and various provincial and local council approvals.

In particular, the livestock operation proposal must meet the requirements of The Planning Act, The Groundwater Protection Act, The Environment Act (Livestock Manure and Mortalities Management Regulation) and The Water Protection Act (Nutrient Management Regulation) as well as other Provincial Acts and regulatory requirements depending on the nature and location of the proposed project.

Strict government requirements based on good science, good land use planning, professional engineering design and construction, and on-going government monitoring and enforcement protects our natural resources, the environment and the public interest.

Rural Area and Agricultural Zoning

The proposed 80-acre site is located in an area that is designated as "RURAL AREA" in The Killarney-Turtle Mountain Municipal Development Plan By-law # 25-2000. This By-law received extensive community review and was approved by local Municipal Council and the Province of Manitoba as the overall land use planning and development guiding document for the Killarney-Turtle Mountain community.

Plan Objective 3.2 states as an objective in the Rural Policy Area "to encourage economic development, growth and diversification in rural areas in an orderly, efficient manner that will maintain and protect the dominant role of agriculture and resource related activities in the rural area."

HyLife has carefully chosen the proposed site as it is located in an agricultural area that is characterized by open agricultural land. This farmland would receive manure nutrient fertilizer from the proposed operation to sustainably grow crops. Our pork production operation bio-security requirements coupled with the practical requirement for an ample sustainable land base to spread manure nutrients ensures the appropriate distribution of livestock operations within agricultural areas.

The proposed site is zoned "AG" Agricultural General in the Killarney-Turtle Mountain Zoning By-Law #2-2016. Local zoning and provincial regulations require minimum separation distances for the facility from property boundaries, single residences, designated land uses, wells and watercourses and designated crown lands. The proposal meets every zoning requirement and in many circumstances, exceeds the minimum separation distance requirements of both the barn and earthen manure storage facility. In particular, this proposal exceeds the minimum setback distance from residences.



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Odour Control

At HyLife, we utilize a multi pronged approach to assist in minimizing odour and potential impacts on area neighbours. This initial step is carefully selecting appropriate sites in the agricultural area that will meet or exceed all local and Provincial setback distance requirements.

HyLife employs considerable focus on the in-barn environment to maintain cleanliness and hygiene with efficient barn design and current technology to maintain a comfortable barn temperature and airflow. This helps to keep the in-barn production of odor to a minimum and creates a positive living and working environment for our livestock and staff.

Outside, we will utilize a 3 row multi-species vegetated shelterbelt around the production facility. This will not only improve the aesthetic appearance of the site, but will create greater lift to better dissipate and diffuse odours.

With respect to manure nutrient application, our plan is to apply manure in the fall post harvest as a one-time event. Manure nutrient application will be done on an anticipated 3-year rotational basis. Manure nutrients will be applied in accordance with all applicable environmental regulations and utilize industry leading technologies. Application will also employ equipment designed to incorporate manure during the application process increasing liquid absorption and reducing odour.

Our manure management plans are prepared by certified manure management planners and licensed manure applicators. Application equipment is equipped with GPS technology and manure nutrients are applied at agronomic rates in accordance with all regulations. Manure management activities are governed and enforced by Manitoba Sustainable Development.

Collectively, these in-barn and outside environmental measures and manure management practices will reduce odour from our proposed operation. Neighbours can be assured that HyLife will make best efforts to address all reasonable concerns brought to its attention. We value our reputation as a good corporate citizen in the community.

Water Quality - Protection of Surface Water and Groundwater

The proposed development is located within the Long River/ Badger Creek sub watershed of the Pembina River Watershed West Interlake Watershed for water management planning purposes. It is located outside of the provincially designated Red River Special Management Area that requires special flood risk mitigation measures to protect from flooding, and ground and surface water pollution.

As in all cases, provincial regulations regulate all activities that have the potential to contaminate both surface and groundwater supply. Besides livestock operations, this includes urban development of cities, municipal (earthen) sewage lagoons and other treatment systems, gas stations, refuse disposal sites, many types of heavy industry, rural residential subdivisions and individual residential septic fields.



Surface and groundwater protection is provided by means of multi-layered regulations and monitoring and enforcement system. This includes location, design and construction of manure storage facilities, certification of manure applicators, strict annual manure testing, and regulating the methods and rate of fertilizer application. Provincial regulation strictly prohibits the application of manure near wells, surface watercourses or over potential aquifer recharge areas (gravel deposits, bedrock outcrops, sinkholes, etc.)

Manure Storage Safety

An earthen manure storage (EMS) is proposed to contain the manure from this operation. Such storage is common and an accepted method for storing and treating liquid manure. Additionally, they are used by almost every municipality and community in Manitoba to safely store and treat human waste.

Earthen manure storages have been regulated by the Province of Manitoba since 1995. A permit to construct an EMS requires a detailed geotechnical assessment of soils; a design prepared by a professional engineer; review of the design and all relevant information by Manitoba Sustainable Development prior to issuing the permit; site supervision of the construction by the responsible engineer and finally certification of the storage by the engineer when the work is completed.

The above process is required for all manure storages constructed in Manitoba.

Since the legislation was enacted in 1995 numerous hog, poultry and dairy storages have been constructed in the Province of Manitoba. This program is among the strongest legislation in North America and has an excellent record of providing safe containment of livestock manure.

As previously mention, setbacks are required from surface watercourses and the proposed EMS meets all setback requirements.

The design and construction standards enforced by the Province of Manitoba ensure that manure storages are designed, constructed and maintained to protect surface and groundwater resources. The Province conducts inspections and audits of manure storages during and after construction to ensure the structural integrity is being maintained. Any storages found to have experienced damage or deterioration are required to implement repairs, managed by professional engineers, to ensure the repairs and changes are done utilizing accepted engineering principles and practices.

Land Base Required to Recycle Crop Nutrients

Nutrients contained in the manure will be utilized as organic fertilizer for crop production. The organic material contained in the manure acts as a soil amendment by improving soil tilth, fertility, and water retention. Over time, increased soil organic matter content also builds a better and more stable soil structure less prone to erosion.



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The manure will be applied as a fertilizer at agronomically accepted rates that will meet crop nutrient requirements. An annual manure management plan must be filed with Manitoba Sustainable Development prior to application of manure to fields. HyLife conducts soil testing to determine crop nutrient requirements and monitor soil nutrient residual values to ensure they are maintained within regulatory limits. The manure application rate is calculated using reasonable target yields, crop nutrient uptake, residual soil nutrient values and manure nutrient levels. Soil and manure nutrient contents are analysed annually.

As the manure management plans are filed with the Province annually, should a build-up of nutrients begin to occur, the Province would be alerted and require changes in the operation's manure management practices.

The land base required to sustainably support this proposed hog operation has been identified in the assessment filed with the Provincial Technical Review Committee (TRC). In fact, the manure agreements that have been signed with area producers exceed the required spread acres.

Area farmers have long realized that the manure nutrients are a valuable resource and provides a long term, sustainable crop fertilizer product. Demand for manure nutrients has increased exponentially over the past number of years as it is considered a valuable and sometimes preferred alternative for crop fertilization.

Water Consumption & Sustainable Water Supply

A new well will be developed for the Tuscany operation.

Prior to the development of a water supply that exceeds 5,500 gallons per day, a Water Rights License must be obtained through Manitoba Sustainable Development. The license process includes the assessment of the proposed use on the aquifer and other uses. Manitoba Sustainable Development establishes withdrawal rates that ensure existing users water supply will not be impacted by the new development. The local aquifer is expected to sustain all current uses as well as the proposed development without any concern.

All developments requiring a Water Rights License must comply with the annual groundwater withdrawal limit set by Manitoba Sustainable Development's Water Licensing Branch.

Traffic

There will be additional traffic daily to the proposed development with the addition of 2.5 new staff for the proposed Tuscany operation. There will also be an addition of 8-12 feed trucks and 2-3 livestock trucks per week. Truck schedules are sequenced to ensure efficient traffic movement to avoid congestion within and outside of our operations.



Traffic will use paved PTH No 18 which is a major provincial highway maintained and under the jurisdiction of Manitoba Infrastructure. The Municipality will also determine the truck route to the proposed site on existing municipal roads that are already maintained by the Municipality.

Quality of Life and Property Values


We respect that existing rural -non-farm residents have chosen to reside in a designated agricultural "Rural Area" where Agriculture and livestock developments are existing or could be expected to develop in the future. As such, farm activity including crop and livestock production, fertilizer application, farm traffic, noise and farm related odours are to be expected in an agricultural area.

We believe that with mutual understanding and respect, we can both co-exist within the area and be good neighbours.

HyLife has and will continue to be a community partner in the Killarney-Turtle Mountain area and a contributor to the growth and prosperity of the area in a sustainable manner. HyLife is confident that this development is representative of these attributes and our commitment to the sustainable, positive growth within the community.

HyLife, once again would like to thank all individuals who provided comments and appreciate the opportunity to provide a response. We respect the views and opinions of all individuals and hope we have sufficiently addressed the questions and concerns that were brought forward.

Regards,



Sheldon Stott, Director of Environment Affairs
HyLife Ltd.