

TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT PREPARED FOR

THE MUNICIPALITY OF WESTLAKE-GLADSTONE

TOPIGS NORSVIN NUCLEUS SITE 2

N ½ OF NW ¼ 16-17-11 WPM

TRC 12-084

May 28, 2021

A. INTRODUCTION – THE TEAM

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

Agriculture and Resource Development (ARD)

- Aggregate Resource Planner
- Agricultural Engineer
- Business Development Specialist
- Crown Lands Manager
- Fish Habitat Specialist
- Groundwater Specialist
- Habitat Mitigation and Wildlife Land Specialist
- Land-Water Specialist
- Livestock Environment Specialist
- Nutrient Management Specialist
- Veterinarians

Conservation and Climate (CC)

- Environmental Engineer
- Environment Officer
- Water Rights Licensing Technologist

Infrastructure (MI)

- Senior Development Review Technologist
- Senior Flood Protection Planning Officer

Municipal Relations (MR)

- Community Planners

And any other specialist or department that may have an interest, which may be consulted during the process.

THE TECHNICAL REVIEW COMMITTEE (TRC) REPORT

Purpose of TRC Reports

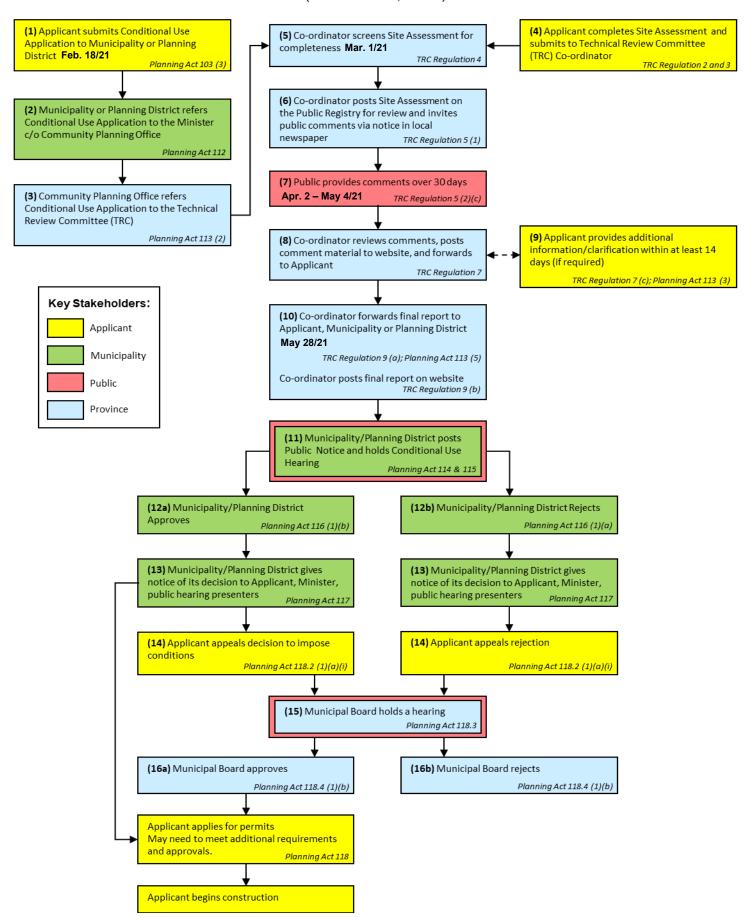
To provide objective, credible, technically-based assessments that:

- a) Enable municipal councils or planning districts 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, planning districts 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, measure 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. As of November 1, 2019, a proponent may appeal a municipal council's rejection of their application or appeal a condition imposed related to municipal council's approval. Appeals are made to the Municipal Board.

Livestock Technical Review Process

(November 1, 2019)



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

Further information can be found at https://www.gov.mb.ca/mr/livestock/public registries.html

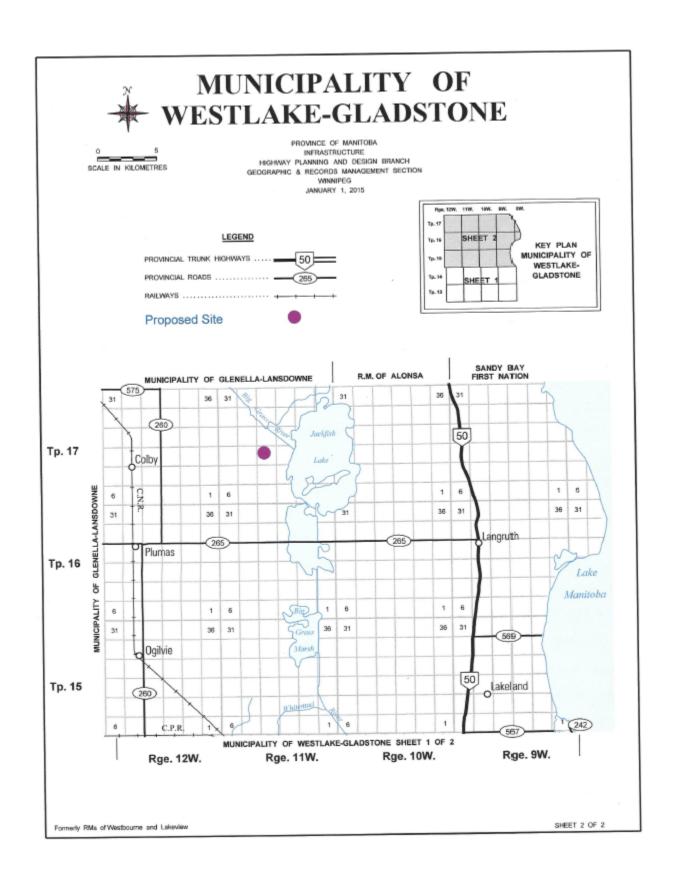
Applicant: Topigs Norsvin Nucleus Site 2

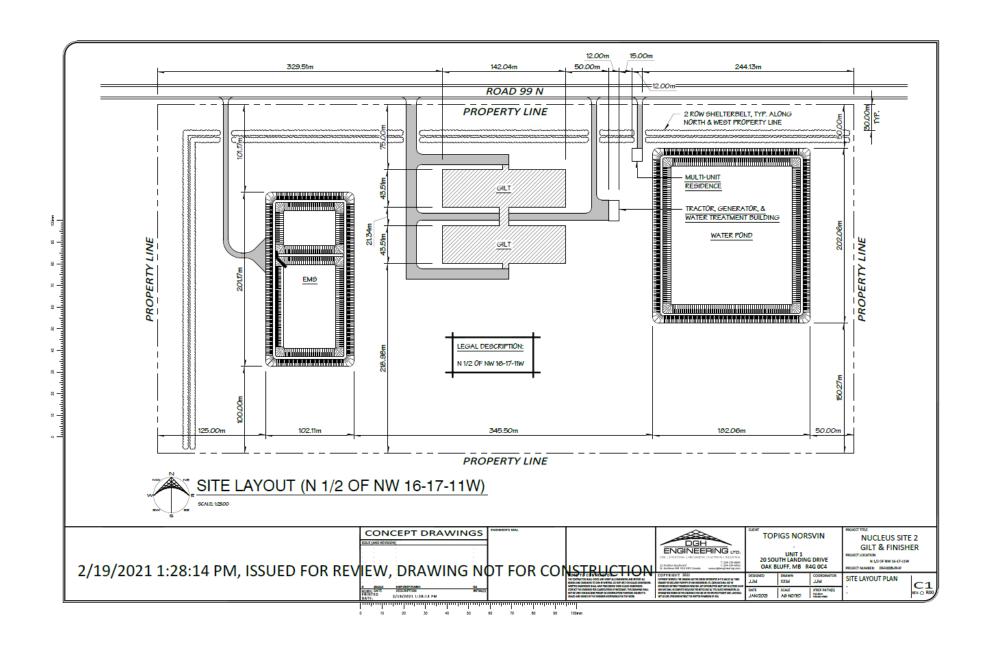
Site Location: N ½ of NW ¼ 16-17-11 WPM. Refer to map below.

Proposal: To establish a pig operation of 10,200 growers/finishers (1,459 animal units)

This will involve the following:

- · Constructing new barn.
- · Constructing an earthen manure storage
- Consuming a maximum of 22,440 imperial gallons of water per day from pipeline and surface water
- Using indoor cooler storage of mortalities prior to transport to a licensed commercial rendering plant.
- Using truck haul routes as shown in map below







C. SITE ASSESSMENT OVERVIEW

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
1	Submitted complete site assessment	Х	Technical Review Committee Regulation 119/2011 requires an applicant to submit a completed site assessment.	MR
2	Clearly identified the current and proposed type and number of animals and animal units	х	Topigs Norsvin Nucleus Site 2 is currently seeking Conditional Use approval to build a 10,200 space grower-finisher pig operation. This is equivalent to 1,459 animal units (AU).	ARD ¹
	Project clearly defined as:	Х	The project is clearly defined as an animal confinement facility. A 10,200 space Swine finisher Facility totaling 1,459 Animal Units (AU).	СС
3	animal confinement facility	Х	The proposed finisher barns are in excess of 6,458 sq. ft. (600 sq.m). Therefore, a building permit will be required from the Inspection and Technical Services Branch (Municipal Relations) under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code. https://firecomm.gov.mb.ca/itsm_main.html .	MR
4	Identified all existing and proposed buildings and structures and related separation distances	х	The proposal complies with the site size, width, side, front and rear yards in the RM of Westbourne Zoning By-law. The nearest residence and designated settlement or recreation areas are outside the minimum separation distances set in the zoning by-law. No variances are needed.	MR
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	х	The project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone.	ARD ²

¹ Agri-Resource Branch

² Water Science and Watershed Management Branch

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
6	Identified suitable water source: (public)/water cooperative and a diversion of Spring flows from RD 99N Ditch to fill farm reservoir and a water consumption rate of 22,440 imperial gallons per day	X	A Water Rights Application has been submitted for this project.	СС
7	Proposed project site meets development plan, zoning by-law	X	The Planning Act requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations. The Planning Act requires municipalities to issue development permits for any development on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not meet the separation distances or setbacks requires Council approval and a public process to vary those requirements. Designation The proposed livestock operation, located in the N1/2 of the NW1/4 16-17-11WPM in the RM of Westlake Gladstone, is designated for Agriculture (Westlake Gladstone Development Plan By-law No. 4-2019) and the proposal complies with Development Policies in section 5.A.3. (Livestock Policies). Zoning The proposed site is zoned "AG" Agriculture General (RM of Westbourne Zoning By-law No.1937) and has a minimum site area requirement of 80 acres with a minimum site width requirement of 300 feet. The proposed project complies with the RM of Westbourne Zoning By-law.	MR

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
8	Identified any unsealed abandoned wells on the project site or spread fields	X	The proposal identifies that the water use for the proposed livestock operation is from a surface water (Diversion of spring flows from RD 99N Ditch to fill the farm reservoir). The provincial water well database does not contain information for well(s) on the proposed property at NW 16-17-11W. The database does indicate a well within the proposed spread field location at SW 24-17-12W. The location of the well and relevant setback are not indicated in the proposal. If the well is present and in use then a minimum buffer as outlined in the Livestock Manure and Mortalities Management Regulation must be maintained during spreading. If the well is present and not in use, it should be located and properly sealed and a sealed well report submitted the Groundwater Management Section of Agriculture and Resource Development for each well sealed. Information on well sealing and well sealing reports are available from Agriculture and Resource Development (204-945-6959) or: at https://gov.mb.ca/water/groundwater/wells_groundwater/index.html . A well drilling professional should seal all but the most basic wells. A list of currently licensed well drilling professionals can also be accessed from the above web page.	ARD3
9	Identified suitable manure storage methods	X	A permit to construct the proposed manure storage facility must be obtained, prior to initiating any of the construction work, in accordance with the Livestock Manure and Mortalities Management Regulation. An application for a permit to construct the manure storage facility must be submitted to Environmental Approval Branch of Conservation and Climate (EABDirector@gov.mb.ca). Design guidelines and application forms are available at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index.html .	СС
10	Identified acceptable manure application methods	Х	The proponent must submit and adhere to a manure management plan approved for the facility per the Livestock Manure and Mortalities Management Regulation.	СС

³ Water Science and Watershed Management Branch

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
11	Mortalities disposal methods identified	Х	The proponent has indicated that mortalities will be stored in an indoor cooler storage prior to transport to a Licensed Commercial Rendering Plant. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation. More specific information is included in the Livestock Manure and Mortalities Management Regulation and at: https://www.gov.mb.ca/sd/waste_management/livestock_program/index	сс
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	х	The proponent indicated all setback distances meet minimum requirements set out in the Livestock Manure and Mortalities Management Regulation.	сс
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	Х	The Flood Protection Level for this site is 226.15 metres (873.2 feet) CGVD28. This level is based off of a 1:200 year flood event from Big Grass Marsh. I would recommend that all structures are built so that the main floor elevation is at least 226.15 metres (873.2 feet) CGVD28. Any buildings with basements should be built so that the main floor elevation is one foot higher then the Flood Protection Level and that the ground at the side of the structure is at the Flood Protection Level.	МІ
14	Proposed acceptable odour control measures	X	The proponent has indicated that a 2-row shelterbelt will be established. Should odour become a problem for neighbouring residents, there is a complaints process under <i>The Farm Practices Protection Act</i> . 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.	ARD ⁴
		X	A shelterbelt is planned for the north and west property lines. The municipality can require a shelterbelt be planted and maintained as a condition on the conditional use order. Section 116(1) of <i>The Planning Act</i> allows municipal councils to require a manure storage cover and the planting of a shelter belt as a condition of approval.	MR

⁴ Agri-Resource Branch

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	X	The required land base for Topigs Norsvin Nucleus Site 2 is 2,051 acres. Topigs Norsvin Nucleus Site 2 has satisfied the land requirement by demonstrating that they have access to 2,401 suitable acres. Please note that 250 acres associated with Field 1, S24-17-12W, was removed from the suitable acres. Additional details are provided in the Appendix A.	ARD ⁵
		X	During manure spreading, setback distances to all groundwater and surface water features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.	СС
16	Indicated if spread fields are located in the Red River Valley Special Management Area or any other regularly inundated area	X	The proponent has indicated that no spread fields are located within the Red River Valley Special Management Area or any other regularly inundated area.	СС
	Proposed spread fields that meet development plan and zoning by-law requirements		The proposed spread fields are designated for Agriculture in the development plan and zoned "AG" Agricultural General or "AR-2" Agriculture Restricted-2 which is a zone recognizing that the land is within the Big Marsh area. All the fields indicated meet the development plan and zoning by-law requirements.	
17		X		MR

⁵ Agri-Resource Branch

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
	Proposed acceptable manure transportation methods	х	The transport of livestock manure is subject to Section 9 of the Livestock Manure and Mortalities Management Regulation. The proponent has indicated a dragline will be used as means of manure transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	СС
18		X	Please be advised that any structures placed within the controlled area of PR 260, PR 265, PR 575 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 583-2433 or Sheena.Delrosario@gov.mb.ca . The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 260, PR 265, PR 575 requires permission from our regional office in Portage. Please contact the Regional Planning Technologist, Denise Stairs at (204) 871-2239 or Denise.Stairs@gov.mb.ca . 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 260, PR 265, PR 575 (125 feet from the edge of the right-of-way).	MI
19	Identified suitable trucking routes and access points	х	The primary proposed truck haul route will utilize an existing municipal road connecting onto PR 260. A significant increase in use is not anticipated.	MI
20	Identified proposed trucking routes – local roads	×	The proposed site is accessed by Road 99N which appears to be improved going east but not going west. The truck route would be east to Road 63W, south to Road 98N and then west approx. 6 miles to PR 260. Road 63W may be subject to seasonal flooding. As per Section 116(2) of <i>The Planning Act</i> , municipalities as a condition of approval may require proponent to enter into a development agreement regarding the condition and upkeep of local roads used as truck haul routes.	MR

Item No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.
21	Known rare species will not be impacted on new sites/lands	X	The information provided in the assessment suggest that there will not be any conflicts with species protected under the <i>Endangered Species and Ecosystems Act</i> and/or <i>Species at Risk Act</i> , or designated as rare or uncommon by the Manitoba Conservation Data Centre (MBCDC). This review is based on existing data known to the MBCDC of the Wildlife and Fisheries Branch at the time of the review. These data are dependent on the research and observations of our scientists and reflects our current state of knowledge. An absence of data does not confirm the absence of any rare or endangered species. Many areas of the province have never been thoroughly surveyed, however, and the absence of data in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should, therefore, not be regarded as a final statement on the occurrence of any species of concern. All future observations of rare or endangered species made by the proponent should be reported to the MBCDC for further review.	ARD ⁶

Provincial Departments: Agriculture and Resource Development (ARD), Conservation and Climate (CC), Infrastructure (MI), Municipal Relations (MR)

⁶ Wildlife and Fisheries Branch

D. PUBLIC COMMENTS AND DISPOSITIONS

	Public Comment Summary		
James Patterson	 CONCERNED The applicant has the following questions about the proposed site of the project: How did Topigs Norsvin select the proposed building site in the Municipality of Westlake-Gladstone? Did Topigs Norsvin accept private proposals for building sites or was the proposed site suggested by the Council of the Municipality of Westlake-Gladstone? Was the Municipality of Westlake-Gladstone community alerted to plans to build on the proposed site before the site was selected? Is the Government of Manitoba, or Topigs Norsvin aware of any conflict of interest that may arise from the proposed site? 		
Todd Tonn Plumas, Manitoba	 OPPOSED Commenter has the following reasons for their opposition: Odour concerns for dwellings within 1.25 miles of the proposed operation. Concerned that the gravel roads might be destroyed with the additional trucks from the project. Concerns about the negative environmental impacts of the project on Jack Fish Lake and the Big Grass marsh. Commenter is concerned that the operation's proposed water use will affect the water availability for residents within the area. 		
Aaron Schmidt Municipality of Westlake- Gladstone	 OPPOSED Commenter has the following concerns: Odour pollution form the operation and its negative impact on the air quality, mental health as well as physical health of residents. The commenter believes the operation would create an unacceptable occupational health hazard to the community. High levels of antibiotics from the operation will be flushed into the surrounding fields, creating the perfect environment for multi disease resistant bacteria and the development of untreatable diseases in humans and other livestock. Concerned about the project contaminating ground water, the Grass River, Big Grass Marsh and eventually Lake Manitoba and in effect disrupting the home of thousands of wildlife. Commenter asks who would cover these environmental costs. Commenter feels that taxes from the project would not be enough to cover for road upgrades, repairs and maintenance. He further asks whether the road will be able to sustain the increased traffic from the project throughout the year. Commenter feels the operation's water use will add to the water pressure problem that residents currently face. He asks how much upgrades to the municipal water will cost and how that will impact individuals costs. Concerned that the construction and operation of the project may have minimal economic and social benefit to the community as there is no guarantee of employing from the community, employees choosing to reside in the community or profits spent supporting local businesses. By proposing only a shelterbelt as a way of reducing odour from the operation, the commenter feels that the proponent is committing to the lowest possible level of odour/toxic air emission management. Concerned that the project will result in property value decline. Commenter feels large hog operations are a social detriment. 		

	Concerned about a potential conflict of interest with the CAO of the municipality.
Joanne Oswald Municipality of Westlake- Gladstone	 CONCERNED Commenter has the following concerns: They did not receive a letter from the municipality about the project. The proposed truck route is too narrow and has several safety issues. Who will pay for the cost of upgrading and maintaining the road? Dust from the road will have health implications for the road users as well as increase the potential of accidents. Water use by the project will affect the municipal water pressure and the water quantity for the municipality. Leaks from the manure lagoon will leach and contaminate wells around, causing unfit drinking water. Methanol gas from the uncovered lagoons contaminating the air and the surrounding environment. The proponent needs to have a two million dollar bond to cover any damages that may be incurred by them. A conflict of interest as the CAO of the Westlake-Gladstone municipality is the wife of one of the land sellers. Another conflict of interest as the two who sold their properties to the proponent have positions on the watershed board.
Sandy Bay Ojibway First Nation	OPPOSED Commenters are concerned about the smell the operation would generate, the health effects, environmental effects as well as the effects to businesses in the surrounding area.
Marlene Gal and Arnold Gal Plumas, Manitoba	 OPPOSED Commenters identified the following issues: Odour from the project site and spread fields would disrupt their quality of life and cause an increase in potential health hazards. There will be a decrease in their property value when the barn is built. Leaching of antibiotics from the manure on spread fields and beaches in the manure lagoon will contaminate both surface and ground water supply, affect human health as well as several other communities. Potential contamination of Big Grass Marsh which is home to ducks, geese, sand hill cranes and many other species. As a foreign company who will most likely hire foreign workers, the project will be built and maintained with minimal economic benefit to the community. There will be additional pressure on the municipal infrastructure including roads, water supply system and the taxes paid by the proponent will not cover the cost of maintenance and upgrades to these infrastructure. Industry hog farms intrude, pollute and cause alienation among residents.
Frank and Cindy Keysers Municipality of Westlake- Gladstone	 OPPOSED Commenters reside two miles away from the project and have the following concerns: Odour from the operation will be felt beyond 3km radius of the project site and will disrupt the quality of life and increased potential health hazards. A manure spreading agreement was signed between the proponent and a renter which was not authorized by the commenters (land owner). This has since led to the withdrawal of the agreement upon direction of the commenters. By proposing an open earthen manure storage without a cover and partial injection method of manure application, the proponent is committing to the lowest level of risk management.

- High levels of antibiotics from the operation will be flushed into the surrounding fields, creating the perfect environment for multi disease resistant bacteria and the development of untreatable diseases in humans and other livestock.
- The environmental impacts of the project including nutrient flow from overland flooding into the Big Grass River, Big Grass Marsh and Lake Manitoba as well as the negative impacts this will have on Sandy Bay First Nation who gets their drinking water from Lake Manitoba would be far reaching.
- The promise of new local jobs is not guaranteed based on past experiences of the
 proponent and other similar livestock producers. Commenter asks if the proponent
 will offer to post a two million dollar bond to cover costs in the event of a disaster
 caused by their barns.
- The proposed water usage by the project will severely affect water quantity and compound the water pressure problems currently faced in the municipality.
- Municipal infrastructure such as water and roads will need to be upgraded to accommodate the project, as such, the commenters feel the expectation of revenue increase by way of taxes from the project is misguided.
- The commenters feel the true beneficiaries of the operation are those selling the land, those getting access to the manure, shareholders and the corporation that owns the operation.

Bill and Cindy Skanderberg Municipality of Westlake-Gladstone

OPPOSED

Commenters reside two miles away from the project and have the following concerns:

- Odour from the operation will be felt beyond 3km radius of the project site and will disrupt the quality of life and increased potential health hazards.
- A manure spreading agreement was signed between the proponent and a renter which was not authorized by the commenters (land owner). This has since led to the withdrawal of the agreement upon direction of the commenters.
- By proposing an open earthen manure storage without a cover and partial injection method of manure application, the proponent is committing to the lowest level of risk management.
- High levels of antibiotics from the operation will be flushed into the surrounding fields, creating the perfect environment for multi disease resistant bacteria and the development of untreatable diseases in humans and other livestock.
- The environmental impacts of the project including nutrient flow from overland flooding into the Big Grass River, Big Grass Marsh and Lake Manitoba as well as the negative impacts this will have on Sandy Bay First Nation who gets their drinking water from Lake Manitoba would be far reaching.
- The promise of new local jobs is not guaranteed based on past experiences of the proponent and other similar livestock producers. Commenter asks if the proponent will offer to post a two million dollar bond to cover costs in the event of a disaster caused by their barns.
- The proposed water usage by the project will severely affect water quantity and compound the water pressure problems currently faced in the municipality.
- Municipal infrastructure such as water and roads will need to be upgraded to accommodate the project, as such, the commenters feel the expectation of revenue increase by way of taxes from the project is misguided.
- The commenters feel the true beneficiaries of the operation are those selling the land, those getting access to the manure, shareholders and the corporation that owns the operation.

Don McCurry Plumas, Manitoba

OPPOSED

Below are the commenter's concerns:

- Odour from the barns and spread fields will disrupt the quality of life.
- Commenter was not consulted about the operation.
- The municipal roads are not designed for the heavy truck traffic that would occur in addition to other safety factors on the narrow roads.

- Without a cover on the lagoon, about 30% of the nitrogen from the lagoon will go into the atmosphere.
- Concerned about pollution of the Big Grass River and Big Grass Marsh due to the project locations proximity to the river and marsh.

The commenter also has the following questions:

- Will the proponent be paying greenhouse gas emissions?
- Will the proponent be paying carbon tax?
- Will the proponent be paying for municipal road upgrades?

Brent Single Plumas, Manitoba

OPPOSED

- Commenter's residence is located close to the barn and feels his quality of life will be severely impacted due to the noxious odours from the barns.
- Open manure storage lagoons means that about 30% of nitrogen will be emitted into the atmosphere.
- Commenter was not consulted about the project.
- Decrease in residential property value.
- The proponent should be required to put up a bond of no less than one million dollars for environmental issues from nutrient runoff into the Big Grass Marsh.

Doug and Shirley Post Municipality of Westlake-Gladstone

OPPOSED

Commenters reside two miles away from the project and have the following concerns:

- Odour from the operation will be felt beyond 3km radius of the project site and will disrupt the quality of life and increased potential health hazards.
- A manure spreading agreement was signed between the proponent and a renter which was not authorized by the commenters (land owner). This has since led to the withdrawal of the agreement upon direction of the commenters.
- By proposing an open earthen manure storage without a cover and partial injection method of manure application, the proponent is committing to the lowest level of risk management.
- High levels of antibiotics from the operation will be flushed into the surrounding fields, creating the perfect environment for multi disease resistant bacteria and the development of untreatable diseases in humans and other livestock.
- The environmental impacts of the project including nutrient flow from overland flooding into the Big Grass River, Big Grass Marsh and Lake Manitoba as well as the negative impacts this will have on Sandy Bay First Nation who gets their drinking water from Lake Manitoba would be far reaching.
- The promise of new local jobs is not guaranteed based on past experiences of the
 proponent and other similar livestock producers. Commenter asks if the proponent
 will offer to post a two million dollar bond to cover costs in the event of a disaster
 caused by their barns.
- The proposed water usage by the project will severely affect water quantity and compound the water pressure problems currently faced in the municipality.
- Municipal infrastructure such as water and roads will need to be upgraded to accommodate the project, as such, the commenters feel the expectation of revenue increase by way of taxes from the project is misguided.
- The commenters feel the true beneficiaries of the operation are those selling the land, those getting access to the manure, shareholders and the corporation that owns the operation.

Darin Walker Plumas, Manitoba

CONCERNED

Commenter is concerned about the type of environmental impact the project will have on the Big Grass River and the Big Grass Lake which are within close proximity of the project. They feel this project could lead to damaging or destruction of the ecosystem.

Commenter feels the proponent should look for alternative sites for the project which are not close to the natural waterways and the marsh. Bonnie Kallert **OPPOSED** Winnipeg, Manitoba Commenter is opposed to the project based on the following reasons: Large hog operations like what the proponent is proposing does not take animal welfare into consideration. The use of antibiotics in this type of operation could leach into the ground water and cause disease resistant bacteria which could be detrimental to human health. By proposing an open earthen manure storage without a cover and partial injection method of manure application, the proponent is committing to the lowest level of risk management. Potential contamination of Big Grass Marsh which is home to ducks, geese, sandhill cranes and many other species. Odour from the operation will disrupt the air quality as well as the quality of life of residents of neighbouring communities. The project may have minimal economic and social benefit to the community as there is no guarantee of employing from the community, paying competitive wages or safe workplace for employees. There is the potential of noise pollution from the thousands of pigs that would be housed in the barns. The cost of upgrading and maintaining municipal infrastructure such as water and roads could outweigh any perceived tax revenue to be generated from the project. There is no feasibility studies to address issues about the water pressure, quality and quantity. Arnold H. Coutts CONCERNED Plumas, MB Commenter expresses the following concerns There wasn't adequate communication about the project with residents A strong public perception about a conflict of interest. The municipal water system pressure would be negatively affected by the project's water usage. Cost of fire department special training and would the municipality pay? The marsh land is sticky when wet and susceptible to run off. As such, the manure lagoon should be able to hold manure for 500 days to prevent any runoff into Jackfish Lake when the spread field conditions are not conducive for manure application. Which municipal roads will be used and will the roads be able to handle the increased traffic, speed and weight? The proponent should put in a two million dollar bond for any problems that arise from their operation. Lindy Clubb OPPOSED La Salle, Manitoba Commenter opposes the proposal based on the following concerns: Safety and health of the community including biological diversity and residents would be at risk Proponent should post a two million dollar bond with the municipality as insurance for contingencies. Any ecological harm from the project would be borne by locals which is unethical. Recommends the use of locals including indigenous people in the workforce to monitor the operations. She ask if the proponent has made any effort to train area residents about work. There are no details in the proposal for pollution control and the proponent's emergency preparedness is lacking in several key areas.

Concerned about what will happen to important surface water sources including Jordan Creek, Big Grass Marsh, Big Grass River and Lake Manitoba in the case of spills and accidents from the project. Commenter asks what safeguards are there to protect the wetlands and ground water from pollution. Concerned about the losses of wildlife in connection with this project. The impact of the added trucks will negatively affect municipal roads. Concerned about the survival of the aguifer and recharge of groundwater. Arlene Walker CONCERNED Municipality of Westlake-Commenter expresses the following concerns: Gladstone Health concerns for workers and nearby residents due to odour and noise from the Swine flu and its possibility of person to person and swine to person transmission. The quality of life of nearby residents including their psychological welfare would be negatively affected by the presence of the barns. Large hog barns causes alienation and social division among community members. The province's regulation to control odour and toxic emissions from lagoons are minimal compared to other European countries. Potential for ground and surface water contamination and its effect on the Big Grass Marsh and the ecosystem that it supports. The proponent should be made to put up a bond of several million dollars in the event of a disaster caused by their operations. There has been limited transparency of the project to those who will be affected. Public hearing for this proposal should wait until can be conducted safely in person. Joy Klassen OPPOSED Brandon, Manitoba Commenter believes that an operation the size that is being proposed has a high potential of contaminating fields, groundwater, public waterways and air quality, affecting residents and animals in the area. Robert Kitler CONCERNED Winnipeg, Manitoba Commenter guestions why the project is progressing without proper sampling to obtain pertinent scientific data to make informed decisions and to prevent the pollution of the aguifer with nitrates. He highlight the perceived conflict of interest with MLA's, municipal members and other parties. Commenter asks what the effect of high ammonia and nitrate concentration on the water table will be for human consumption and creatures of the Big Grass River and Marsh. Randy Court **SUPPORT** Plumas, Manitoba Commenter feels the proposed project meets all requirements concerning the community, environment and social impacts, as such supports the project. Jackey Kreutzer **OPPOSED** Plumas, Manitoba Commenter believes that the odour from the barns would affect their quality of life and deter young families who choose to live in the area to leave. They are also concerned about the health hazards that may arise from the polluted air. They feel the location of the barns and spread fields in close proximity to water bodies increases the potential for manure run off, leading to the pollution of ground and surface water and affecting the wildlife that live in the area.

Jason Schmidt Plumas, Manitoba	 OPPOSED Commenter opposes the proposal and has the following concerns: Polluted air with its associated social and health hazards would significantly impact the quality of life of the commenter and his family. The water pressure from the municipal water system would worsen if the barns tap into it. The additional truck traffic would cause dust, noise, road damage and increase the potential of vehicle accidents. Roadways are narrow, posse challenges when vehicles must pass each other and would need fixing to be able to accommodate the increased traffic. Commenter asks who will pay for these road enhancements and maintenance. The proposed shelterbelts, if planted close to the roads could create blind intersections or cause winter snow build up on the roads. Due to the proximity of the barns and spread fields to Big Grass River, any kind of run off will automatically flow into the River and eventually into Lake Manitoba causing pollution for many species that live in these water bodies. There is a perceived conflict of interest about the project which need to be clarified.
Darin Walker Plumas Game and Fish Association, Manitoba	OPPOSED Commenter believe the proximity of the site to the Big Grass River and Marsh, which is a game bird refuge will increase the chances of air and water pollution and negatively affect fish, wildlife and other marsh ecosystem.
Janice McLaughlin	OPPOSED The commenter feels the proximity of the site to the Big Grass River and Big Grass Marsh would pollute these water sources as well as Lake Manitoba.
Brenda Meikle Portage la Prairie, Manitoba	CONCERNED The commenter feels the barns would contribute to pollution of Lake Manitoba.
Janet Painter Portage la Prairie, Manitoba	CONCERNED Commenter is concerned that the absence of a manure storage cover is likely to lead to the transmission of viruses from the lagoon to other lakes when birds land around the lagoon area. She is concerned about the absence of sea level measurement for the proposed manure storage facility and feels this should be a provincial requirement if it isn't. Although the proposal indicates the project is not in the Red River flood plain, its proposed location could still have impacts on Lake Manitoba drainage area and Assiniboine drainage area during heavy rains or 100 year flood events.
Laura Meikle and Jamie Sokolosky	CONCERNED Commenters feel the project would be detrimental to the flora and fauna living in and around Lake Manitoba. They feel the lake is improving after the 2011 floods and it would be inappropriate to allow projects that could pollute the lake.
Darrin Bulas Plumas, Manitoba	 CONCERNED Commenter has the following concerns: The pressure from the water system is a concern and would worsen if the barns were to draw water from it too. Gravelling the proposed truck routes would require huge amounts of gravel which would deplete the local gravel pits and result in higher future gravel prices for the local area. Smell from the barns and dust from the roads would be unsafe and undesirable for existing farmyards in the area.

	 There is a perceived conflict of interest in the community surrounding the project. The soil at the site is saline due to excess magnesium, manganese and calcium. The site must have totally enclosed and well covered manure storage to prevent nutrient leaching and reduce smell and nitrous oxide from getting into the atmosphere. The proponent must commit a two million dollar bond to the municipality to hold in case there is a need to clean up any environmental mess from the project.
Ryan Lee	OPPOSED Commenter is opposed to the project.
Christina Bulas Plumas, Manitoba	 OPPOSED Commenter has the following concerns: The pressure from the water system is a concern and would worsen if the barns were to draw water from it too. Smell from the barns and dust from the roads would be unsafe and undesirable for existing farmyards in the area. Gravelling the proposed truck routes would require huge amounts of gravel which would deplete the local gravel pits and result in higher future gravel prices for the local area. In wet years, the marsh can back up to within 100 metres of the site, coupled with a high water table, this could result in muddy working conditions for employees. The soil at the site is saline due to excess magnesium, manganese and calcium. The site must have totally enclosed and well covered manure storage to prevent nutrient leaching and reduce smell and nitrous oxide from getting into the atmosphere. The proponent must commit a two million dollar bond to the municipality to hold in case there is a need to clean up any environmental mess from the project.
Deanne Foster	OPPOSED Commenter is opposed to the proposed project.
Michael Gerstein Sandy Bay Ojibway First Nation (SBOFN)	 OPPOSED Commenter indicated the following as their reasons for opposing the project: The project's location is in close proximity to SBOFN and within their traditional territory. The proponent has had no consultation with SBOFN regarding the project's potential impacts on the exercise of their Aboriginal and Treaty rights. The proponent, in their proposal, did not indicate the anticipated adverse effects of their project on the surrounding area, environment and wildlife as well as how those effects would be mitigated. Increase in noise, odour and vehicle traffic associated with the project would result in reduced or diminished game to hunt. Concerned about the degradation of water quality and its effect on SBOFN members' rights and ability to fish. Relevant and necessary information to enable SBOFN to conduct a comprehensive assessment of the project is limited in the proposal. The proposal has failed to satisfy section 106(1)(b) of The Planning Act which requires that a conditional use must not be detrimental to the health or general welfare of people living or working in the surrounding area, or negatively affect other properties or potential development in the surrounding area. Prior to the project advancing any further, meaningful good faith consultation must occur.

lan Cook Minnedosa, Manitoba	CONCERNED Commenter represents Birds Canada and is concerned that should high concentrations of nutrients from the proposed project enter the surrounding waterbodies, it could affect water quality in the Big Grass Marsh and Lake Manitoba, affecting several important bird and biodiversity that depend on these areas.
Kathryn McLaughlin and Larry Harder St. Laurent, Manitoba	 OPPOSED By proposing an open earthen manure storage without a cover and partial injection method of manure application, the proponent is committing to the lowest level of risk management. High levels of antibiotics from the operation will be flushed into the surrounding fields, creating the perfect environment for multi disease resistant bacteria and the development of untreatable diseases in humans and other livestock. The environmental impacts of the project including nutrient flow from overland flooding into the Big Grass River, Big Grass Marsh and Lake Manitoba as well as the negative impacts this will have on Sandy Bay First Nation who gets their drinking water from Lake Manitoba would be far reaching. The proposed project without any appropriate environmental precautions will cause damage to the environment, health of community residents, air and water quality in surrounding waterways.
Keith Koncz Municipality of Westlake Gladstone	 OPPOSED Commenter's opposition is based on the following concerns There is low water pressure from the municipal water line and the project would make it worse. What will be the effect of the project on migratory birds that stop in the Big Grass Marsh? The proponent should be willing to put up a two million dollar bond in a case of emergency.

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at: https://www.gov.mb.ca/mr/livestock/public_registries.html

See Appendix B for the proponent's response to the public comments.

E. CONCLUSIONS AND RECOMMENDATIONS

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

- 1. As per Section 114(1) of *The Planning Act*, at least 14 days before the date of the hearing, Council must:
 - a) send notice of the hearing to
 - i. the applicant,
 - ii. the Minister (c/o the Portage la Prairie Community Planning Office),
 - iii. all adjacent planning districts and municipalities, and
 - iv. 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;

and

- b) post a copy of the notice of hearing on the affected property in accordance with Section 170 of *The Planning Act*.
- 2. 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.
- 3. 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 Portage la Prairie Community Planning Office), and
 - c) every person who made representation at the hearing.
- 4. Councils are requested to include in their resolution and/or Conditional Use Order, notification that the applicant may appeal council's decision to reject the application or appeal a condition imposed by council related to its approval as per Section 118.2 of *The Planning Act*.
 - As per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board:

for an application for approval of a conditional use made in respect of a large-scale livestock operation,

- (i) a decision to reject the application,
- (ii) a decision to impose conditions.
- 5. As per Section 118, no development or expansion of a livestock operation that is the subject of an application under this Division may take place until
 - (a) the application is approved and the applicant complies, or agrees to comply, with any condition imposed on the approval under this Division; and

- (b) the applicant obtains every approval, including any permit or licence, required under an Act, regulation or by-law in respect of the proposed operation or expansion, and complies with, or agrees to comply with, any condition attached to the approval.
- 6. Council is welcome to contact Manitoba Conservation and Climate, Environmental Approvals Branch or Regional Environmental Compliance and Enforcement staff with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98) including compliance and enforcement issues.

Recommended Actions to Proponent

- 1. That any additional measures identified through subsequent provincial licencing or permitting in order to minimize any identified risks to health, safety and the environment be undertaken.
- 2. That as per Section 118.2(2)(b), an applicant may appeal the following decisions of a board or council to the Municipal Board:
 - (i) a decision to reject the application,
 - (ii) a decision to impose any condition on the approval.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title Branch	Contact
Erin McCleery	Municipal Relations	Regional Manager Community Planning Branch	204-945-1143
Petra Loro	Agriculture and Resource Development	Agri-Ecosystems Specialist – Livestock Environment <i>Lands Branch</i>	204-918-0325
Barsha Sagan	Conservation and Climate	Environmental Engineer Environmental Approvals	204-795-7175
Jeff DiNella	Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	204-945-2664

Appendix A

Agri-Resouce Branch – Land Assessment Details

Topigs Norsvin Nucleus Site 2 has met the land requirements for 10,200 grower-finisher pigs (1,459 AU) as follows:

In areas of lower livestock intensity such as the RM of Westlake-Gladstone, 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 in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future.

Typical, modern feeding practices for pig production were used to estimate nutrient excretion for Topigs Norsvin Nucleus Site 2. Realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Westlake-Gladstone were used to estimate crop nitrogen uptake and phosphorus removal rates for the crop rotation specified in the proposal.

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. Reconnaissance soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is primarily Class 2 and 3 with some areas of Class 5. The main limitation is wetness (W) with some areas of salinity (N) or lack of moisture (M).

The required land base for Topigs Norsvin Nucleus Site 2 is 2,051 acres. Topigs Norsvin Nucleus Site 2 has satisfied the land requirement by demonstrating that they have access to 2,401 suitable acres. Please note that 250 acres associated with Field 1, S24-17-12W, was removed from the suitable acres.

Water Branch – Agriculture and Resource Development

Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving manure in southern Manitoba because long-term trend analysis of total phosphorus and total nitrogen has shown significant increases in these nutrients in the Assiniboine and Red rivers (Jones and Armstrong 2001).

The proponent is planning to apply manure in fall. Liquid manure will be incorporated within 48 hours. Injection and incorporation are both practices which reduce the risk to surface water when compared to surface broadcast alone.

For most crops, manure contains an excess of phosphorus (P) compared to nitrogen (N) and as a result, application at N-based rates causes a buildup of soil P. Practices which reduce N losses from the manure improve the N:P ratio in the manure and help slow P buildup when manure is applied at N-based rates. The proponent is planning to apply liquid manure with partial injection or broadcast with incorporation which will reduce N losses compared to methods without incorporation.

The proponent has acknowledged the setback areas for all water features have been observed and excluded from land base calculations. Setbacks should be clearly communicated to and observed by those involved in manure application to minimize the risk of nutrients entering surface and groundwater.

Manitoba has included phosphorus as a nutrient by which fertilizer application through manure. synthetic fertilizer, and municipal waste sludge to agricultural lands may be limited. Many agricultural soils in Manitoba, especially areas with low livestock intensity (such as the RM of Westlake-Gladstone), are considered phosphorus deficient and therefore, manure is an ideal fertilizer to support crop production. However, manure application can increase soil phosphorus over time and other spread fields may need to be added to prevent excessive soil phosphorus build up. As excess phosphorus levels build up in soils, greater losses occur to surface and ground water. It should be noted that Olsen soil-test phosphorus levels of 60 ppm are well above phosphorus needs for most crops (over 20 ppm is usually considered agronomically very high). In areas of lower livestock intensity such as the RM of Westlake-Gladstone, 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 in the region to balance manure phosphorus with crop phosphorus removal, should it be necessary in the future for long-term sustainability. To remain environmentally sustainable over a long-term planning horizon of 25 years or more the proponent acknowledges that 4,039 acres may be required for the operation. The proponent has identified 2,401 acres for manure application at this time. Application to meet crop N requirements is estimated to use 2,051 acres. Application at 2 times the crop removal of P is estimated to use 2,020 acres (4,039 acres is estimated to achieve P balance [phosphorus removal equal to phosphorus application] with current crop choices and yield potential).

As phosphorus levels build up in soils, the concentration of phosphorus in runoff to surface waters increases. It is important to rotate manure application across all spread fields and whenever possible focus manure applications on fields with low Olsen-P soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

The soil test reports indicate elevated soil salinity in some spread fields. Salinity is usually highly variable within a field and the more saline areas generally have reduced yields and are therefore prone to nutrient buildup when manure (or fertilizer) is applied at the same rate as more productive parts of the field. Saline areas that are less productive should be monitored for nutrient buildup and may require different management.

During manure spreading, setback distances to all groundwater features as prescribed under the Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance.

Appendix B - Proponent Response



May 14, 2021

Technical Review Co-ordination Unit Municipal Relations, Room 604 - 800 Portage Avenue, Winnipeg, MB, R3G 0N4

Attn: TRC Coordinator

Re: TRC File No. TRC-12-084 (Topigs Norsvin Nucleus Site 2)

At Topigs Norsvin Canada, we recognize that formal public review of a proposal vetted through provincial and local governments processes are an important component in Manitoba's livestock reviewand approval process. We are pleased to participate in this public consultation process. We propose to build a 1,459 Animal Unit (AU) Hog Finisher livestock operation on 80 acres on the N1/2 of the NW16-17-11W in the Municipality of Westlake-Gladstone.

On behalf of Topigs Norsvin Canada, I wish to acknowledge and thank all persons and organizations that have submitted comments and concerns to the Technical Review Committee (TRC) on our application. And we respect the many views and comments received. We have carefully reviewed and considered all comments and concerns. We also appreciate the opportunity to correct some apparent misconceptions and misinformation regarding our proposal. In doing so, we will also outline how the various concerns can be addressed or mitigated.

But first before getting into specifics, please let me describe again who Topigs Norsvin Canada is and what we are proposing to build and operate in the Municipality of Westlake-Gladstone.

Topigs Norsvin Canada and Delta Canada Research Centre

We are the world's most innovative swine genetics company. We employ and rely on many of the most renowned and published animal scientists and geneticists in the world. We are part of a farmer owned cooperative that first started in The Netherlands. Today, we are international and are present in 54 countries with over 700 employees.

We are also proudly a Canadian subsidiary company, since 1994. Our Topigs Norsvin Canada head office is located at Oak Bluff, MB in the R.M of MacDonald. We currently have 68 employees with over 60 employed at Oak Bluff and at various farms in Manitoba located in the R.M.'s of Armstrong, Piney,

Rockwood and Woodlands. We are also the largest swine breeding stock supplier in Canada.







CT Scanning a Live Boar

Our Delta Canada Research Centre opened in 2018 in Woodlands, Manitoba. It is the heart of our Research and Development Program targeting maximum genetic progress. We use state of the art technology including CT scanning for high density data collection on live, high health breeding boars. Wemeasure traits by collecting data and scoring the pigs for carcass and meat quality, feed efficiency, health, robustness, and productivity in order to make genetic selection and better breeding animals.

Many of our research initiatives are done in collaboration with the University of Manitoba Animal Science faculty and post-graduate students.

Genetic Nucleus (GN 2021) Project

Our proposal is to establish a newly estimated \$29 - 30 million Genetic Nucleus Farm in the Municipality of Westlake-Gladstone. If developed in 2021-22, it will become an integral part of Delta Canada's Research & Development Program. GN2021 will provide candidate breeding stock for continuous performance testing and selection while also ensuring high animal welfare with low environmental impact. We propose a 1,600 space (710 AU) Sow Farrow to Nursery on Nucleus Site 1 and 10,200 space (1,459 AU) Finisher operation on Nucleus Site 2. The two sites are located roughly 3.5 miles apart and are generally located over 7 miles northeast of the Plumas settlement centre. Both are on open cropland but with relatively few residences within 3 km of Site 1 and no residences within 3 km of Site 2.

Topigs Norsvin Canada's new barns will introduce and utilize enhanced animal welfare concepts to ourhigh health, breeding herd. This will include increased floor space per pig, open farrowing pens and loose housing during pregnancy, climate controlled indoor temperature, cooling and ventilation, automatic individual feeders and drinker stations, and the introduction of "play pen items" to root andprovide stimulation. Close animal care and health monitoring of the swine herd will be done to help inthe selection of the best candidates to go to Delta Canada for CT scanning, performance testing and scoring. We also utilize specialized trailers that provide extra space, access to fresh drinking water andmechanical heating and cooling ventilation for livestock transport.

In total, GN2021 will create up to 25 new jobs and boost the local economy.

Community Consultation

Some public comments received by the TRC expressed disappointment over perceived lack of public consultation on the project. This is unfortunate given Topigs Norsvin Canada's best efforts to consultwith the community under trying Covid 19 limitations and winter weather conditions. We drove in separate cars, wore PPE masks and physical distanced, whenever we met someone.

We were pleased to participate in a virtual Town Hall organized by the Municipality on December 11, 2020 to describe our then conceptual project to the community. Later, in our early project planning and site options/feasibility review stage, we met with a number of farm producers and area neighbours door-to-door armed with pamphlets to introduce ourselves, the GN2021 project and to talk about possible opportunities in the general area. We also received a number of telephone and email inquiries from interested parties which we appreciated and followed up on.

Project specifics were premature to share until feasibility and site reviews, preliminary project design and proposals were completed. Yet we believe it was still worth-while and important to reach out early to inform the community and to obtain initial views and expressions of interest. We hope that our manyincremental efforts to reach out and inform would be appreciated by the community. In fact, none of this early consultation was mandatory. We took the time. Made the efforts to inform and are pleased that we did.

Livestock Review & Approval Process

Once final proposals are complete and formal applications are made, interested residents and public have two opportunities to review all details of project proposals and to comment in the provincial livestock TRC and local Conditional Use application, review and approval processes. Adjacent municipalities and First Nations governments, planning districts and other non-governmental organizations are also afforded the opportunity to provide input and make their views known.

Our intent at this first stage in the formal review process is to obtain conditional use approval. This would enable us to commit to and proceed with more detailed designs, plans, and a multitude of otherlocal and provincial permit applications. Under
The Planning Act">Planning Act, all approvals would need to be obtained before any development can begin.

Conflict of Interest

Rumours of possible conflict of interest against the Municipality's Chief Administrative Officer (CAO) in relation to the GN2021 Site 1 (or for that matter, Site 2) proposals is completely unfounded. We have found the CAO's actions to be ethical and professional at all times.

We understand that a declaration of a possible conflict of interest was declared to the Municipal Council. Thereafter, we as development proponent have not had any contact with the CAO, nor Municipal Council members in the final development and formal submission of this application.

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. We believe that this is some of the strictest requirements in North America. This process includes a mandatory provincial government technical review, public reviews, formal public hearing and other provincial and local council approvals.

In particular, this proposed livestock operation must meet the requirements of The Planning Act, The Groundwater Protection Act, The Environment Act, (Livestock Manure and Mortalities Management Regulation), The Water Protection Act (Nutrient Management Regulation), The Water Rights Act (Water Licensing Regulations), The Workplace, Health & Safety Act and the Manitoba Farm Building Code (fire safety and fire protection) the latter of which is enforced by the Office of the Fire Commissioner. Depending on the nature and location of the proposed project, other Provincial Acts and regulatory requirements may be applicable.

Strict government requirements based on good science, good land use planning, professional engineering design and construction, and on-going government monitoring and enforcement protects overall Public Interest and balances the conservation and wise use of natural resources, environmental protection, public health and safety and the economy.

Agriculture Area and Agricultural Zoning

We have selected Nucleus Site 2 at this location because "annual crop farming and other livestock operations" are the predominant developed rural land use in the area. The site is ideally located on wide open farmland that provides a sustainable land base to apply organic manure nutrients for crop production. It has relatively few occupied dwellings nearby and also meets our requirement for a 5-mile biosecurity buffer from other major swine operations. Moreover, it is close to good access roads, water supply and within reasonable distance to hydro. This location within the Westlake-Gladstone Municipality also provides regional access to the provincial highway network, a reasonable travel distance to the Winnipeg International Airport and our head office in Oak Bluff, MB.

The proposed 80-acre site is designated "AGRICULTURE" in The Westlake-Gladstone Development Plan, By-Law No. 2019-04. This Bylaw was prepared with extensive community review and was approved by local Municipal Council and the Province of Manitoba. It provides long range and consistent local land use planning and sustainable development policies to guide future growth and development of the Westlake-Gladstone Community.

Amongst other development objectives and policies Section 5 Rural General states that:

"Rural areas of the Municipality celebrate a rural way of being protecting the ability of agricultural producers to adapt and grow their operations as necessary; and allowing newcomers the opportunity to engage in agricultural activities in a respectful and meaningfulway. Rural areas support the agricultural economy, which is the backbone of Westlake-Gladstone".

The proposed site is also zoned "AG" Agricultural General in the Municipal Zoning By-law No. 1937, as amended. The proposed major livestock operation is a conditional use in the "AG" zone requiring localand provincial review to ensure that the proposed development would conform to the development plan, is properly sited and compatible with surrounding land uses.

Compliance with minimum separation distances in local zoning and provincial regulations are key measures of proper siting and compatibility with other rural land uses. Combined, this serves to avoidland use conflicts and provide environmental protection. This includes minimum separation distances and setbacks to property boundaries, single residences, designated land uses, wells and watercourses and designated crown lands.

This proposal meets every zoning requirement. Indeed, in many instances, it also exceeds the minimum separation distance requirements of both the livestock facility, manure storage facility, farm pond and other accessory structures.

Odour Control

Farming is a way of life. Those of us who choose to live on or near a farm, soon come to realize that there will be times when some farm smells will be present. This proposed livestock operation at Site 2 istypical of modern finisher farm operations that today already successfully and sustainably operate throughout many parts of Agro-Manitoba.

Provincial government regulations and local zoning establish minimum separation distances from major livestock facilities to designated towns, settlement centres, other designated areas and residences.

We have carefully chosen the proposed two sites in the Agriculture area that not only have relatively few residences but ensure that all separations distances are not only met; but in many instances are exceeded. These site locations also provide extra distance from residences and are situated on the leeward side of the most prevailing north-westerly winds. For Site 2, the closest neighbour would be 2.3miles (3.7 km) to the south-west.

Despite this large distance, we still propose to plant a two-row shelterbelt around the barns and earthen manure storage facility. We will also obtain the advice of a horticulturist regarding appropriate and hardy tree species, preparation of planting beds and growth and maintenance practices to use.

The earthen manure storages (EMS) will be a two-cell lagoon that will provide a means for solid-liquid separation partial treatment. While we do not propose to install covers on the EMS because of our rural agricultural remote locations; we commit to enter into a development agreement that would require us to install a cover if deemed warranted by Council in future. We ask that we be given the opportunity to operate for at least a full year to see if a cover needs to be installed.

We have enough spread acres to enable us to apply manure on a multi-year rotation cycle. The manure nutrients will only need to be applied on 600 to 750 acres per year for proposed Nucleus Site 2. This willbe strategically applied over 2 - 3 good weather days only one time in the fall and after harvest. Normally, this is when there is cooler weather outdoors.

We will also be using modern drag line manure applicators in the fields that slit the soil and dribble manure into the soil. Normally, it would take 24 to 48 hours to dry and be as stable in the soil as synthetic chemical fertilizers or other animal manure on the land. In dry years, the liquid manure couldbe soaked up within ½ to 1 hour.

All mortalities will be kept indoors in cold storage to prevent odour and decomposition until it is time to transport for commercial rendering.

Taken together, adherence to all minimum separation distances (and in most cases even exceeded), compliance with government regulations and industry best practices will prevent intense and prolonged exposure to odours so that it will not pose a health risk. In fact, other than the few days required to spread manure nutrients on cropland, odour from the barns and earthen manure storage should barely be even noticed by residents due to the large separation distances.

Protection of Ground and Surface Water Quality

Provincial regulations regulate all activities that have the potential to contaminate both surface and groundwater supply. 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, individual residential septic fields and earthen manure storage (EMS) for livestock operations.

The EMS for our proposed project will be designed by, supervised during construction and certified by a professional engineer. It will comply with rigid geotechnical and design specifications to ensure structural integrity to protect ground and surface water and the environment. Some public comments were concerned that the operation was only 212 m to 220 m to the Big Grass River. As proposed, the proposed EMS would be 1.5 km south of the river and separated by elevated roads, cultivated farmlandand a vegetated manmade berm lining the bank edge of the Big Grass River.

The EMS, barn structures and farm pond reservoir will all be <u>designed and constructed to meet flood</u> <u>protection levels</u> as determined by Manitoba Infrastructure, Hydrologic Forecasting & Water Management and local zoning by-law requirements. This is already a common mitigation measure thathas been successfully used in the Red River Valley Special Management Area that includes most of the Winnipeg Capital Region and the Interlake Region.

Like many larger farm operations, we will have an annual manure management plan prepared by a professional agrologist or certified manure management planner. Based on annual soil testing, nutrient budgets will be calculated to meet Environment Act, Manure & Mortalities Management Regulations. Application rates will vary based on soil test results and the agronomic requirements of the crop. We will also use licensed commercial applicators with GPS equipped applicators that will track application during manure application and incorporation into the soil.

There are more than sufficient spread acres available to meet the land base required to apply manured fertilizer. At the request of the landowner, the S1/2 of 24-17-12W has been eliminated as spread fieldsfor proposed Nucleus Site #2. It should be noted that there is still surplus land to sustainably meet nutrient land base requirements.

Provincial regulation also strictly prohibits the application of manure near wells, surface watercourses orover potential aquifer recharge areas (gravel deposits, bedrock outcrops, sinkholes, etc.) The proposed development meets or exceeds all required setbacks from surface watercourses.

Annual manure application is recorded and is monitored and subject to audit and enforcement by Manitoba Conservation and Climate.

Sustainable Water Supply

Connection to the regional water utility to supply to the proposed livestock operation will be used onlyfor domestic purposes for staff washrooms, showering and cooking. It will not supply water for livestock.

Water supply for livestock will be treated surface water stored in an on-site farm pond that will be filled once in the spring from surplus flows in the Big Grass River and/or from nearby road-side ditches if available. This will help somewhat to reduce potential spring flooding in the area. The farm pond will also provide standby water for emergency fire protection if ever required.

A Surface Water Rights License application has been applied for this project. In processing the application Manitoba Conservation & Climate will ensure that priority for water supply will be given to existing users and the environment before any future allocation to new users. A hydrologic assessmentby the Province will determine a 10-year average for the surface water supply. It will then save 20% of the calculated volume of water to retain as sustainable risk threshold. Of the remaining 80%, ½ is also saved for the environment (e.g. conservation and protection of aquatic habitat, wildlife, bio-diversity, etc.). The other ½ (40%) is available for water use allocation on a first come first served basis with again existing users receiving priority.

Use of Antibiotics

Topigs Norsvin does not use antibiotics in feed or water and does not use routine antibiotic injections. Antibiotics are only given to individual animals for specific medical reasons. If the pig is sick, we treat it. All medications are controlled by veterinarian prescription and recorded. All medications and health are closely monitored by veterinarians who make monthly visits.

We rely primarily on a combination of strict bio-security, robust genetics and comfortable, climate controlled living environment with more space, open farrowing and group housing, specialized feedersand drinkers, pen enrichments and close health monitoring to provide our farm animals with good andhealthy lives.

The Canadian pork industry also promotes and educates pork producers to limit use of antibiotics through industry programs such as Canadian Pork Excellence (CPE) and related on-farm programs:

- PigSafe food safety and bio-security
- PigCare animal care and a revised Animal Care Assessment (ACA)
- PigTrace improved traceability for emergency risk management

Road Condition and Traffic Safety

There will be 3 feed trucks and 3 livestock trucks per week servicing Nucleus Site 2. This roughly equatesto about 1 truck per day on average. Actual truck schedules will vary depending on feed and livestock delivery schedules. Some days there may be no truck, tomorrow there may be two. There will also be 3 vehicles per day for staff and visitors. All vehicles will comply with speed & load restrictions.

Vehicle traffic will travel from PR 260 along Rd 99 N for approx. 6 or 7.5 miles to Site 2 (depending on which final north-south mile road route is taken).

Rural Quality of Life and Property Values

Manitobans are decent, hardworking people. This is perhaps nowhere more so than in a rural farm community. Neighbouring farmers and rural residents get to know each other and are often willing tohelp each other out when someone is in a bind.

Living in a designated "Agriculture" area means that crop and livestock farmers and rural residents need to co-exist together. This includes the recognition that normal farm activity, traffic, dust, noise and smells should be expected; particularly at peak times for seeding, spraying, harvesting and fertilizing.

Mutual respect and the willingness to co-exist together fosters a strong sense of community. It also contributes to a high quality of life for all while still attracting and accommodating new developmentand employment opportunities in the Municipality.

Our proposed GN2021 project is in general conformity with the overall objectives and policies of the adopted Westlake-Gladstone Development Plan and complies with all local zoning by-law requirements. These in combination with other measures and requirements will create effective safeguards to protect the rural and natural environment. This includes strict compliance with all provincial regulations, adoption of appropriate flood mitigation measures coupled with good project design and livestock operations "best practices".

Together, these multi-layered measures will ensure our proposed development including regulated manure fertilizer spreading will:

- not directly or indirectly adversely affect land and waterways including the Big Grass River-Jackfish Lake-Big Grass Marsh environs, wildlife management areas, bird refuges, community pastures and other crown and patented lands in the Lake Manitoba watershed,
- **not** pose a risk to health, safety or the environment,
- **not** degrade rural farm and residential property values,
- **not** diminish the rural quality of life in the area; and
- will be compatible with the general nature of the surrounding Agricultural Area.

Topigs Norsvin Canada looks forward to being an active and contributing member of the Westlake-Gladstone community and to fostering good neighbour relations with all residents, producers and localarea business community.

Best regards.

Mike Shaw

Director Genetic Services

Topigs Norsvin Canada Inc.

