

TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT PREPARED FOR

THE RURAL MUNICIPALITY OF PINEY

J&D Grenier Farms Ltd.

NW 04-05-11EPM

TRC 12 - 056

August 26, 2019

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); Land-Water Specialist, Environment Officer, Habitat Mitigation and Wildlife Land Specialist, Regional Wildlife Manager, Groundwater Specialist, Water Rights Licensing Technologist
- 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.

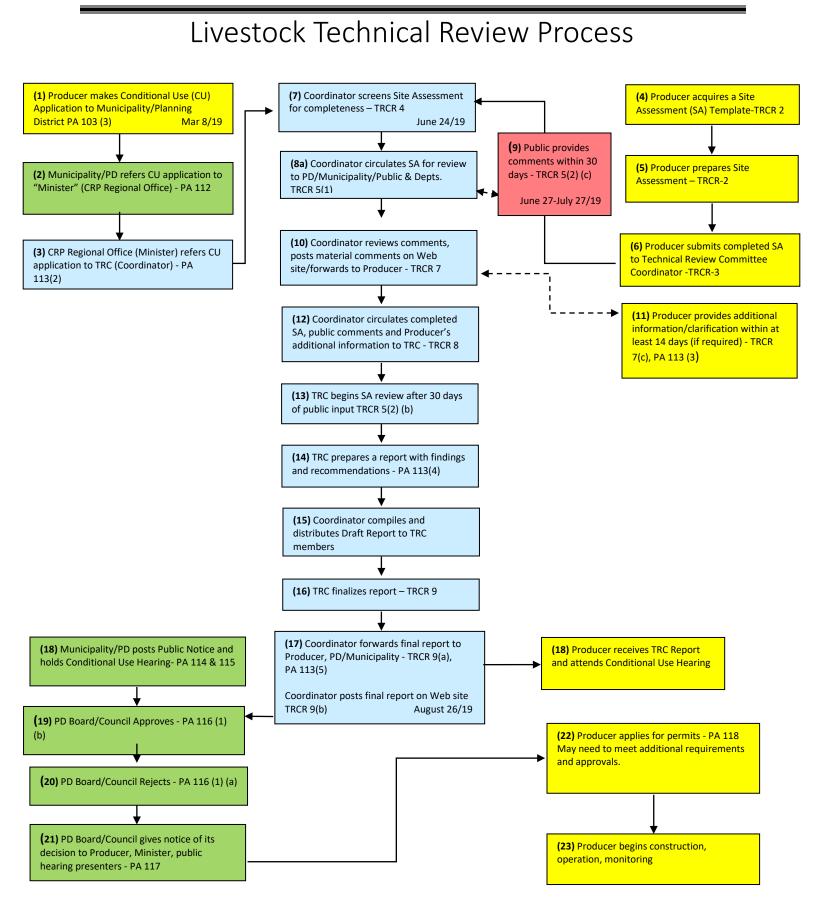
THE REPORT (TRC Process Box 17)

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.



J&D Grenier Farms Ltd.

Draft TRC Report

B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to: http://www.gov.mb.ca/mr/livestock/index.html

Applicant: J & D Grenier Farms Ltd.

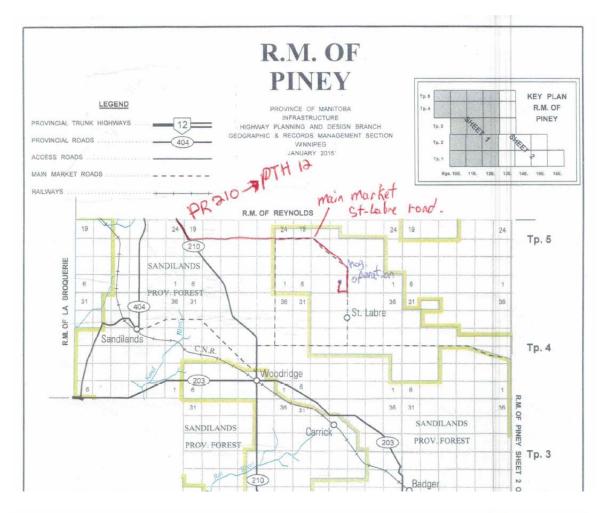
Site Location: NW 4-5-11 EPM

Proposal:

To expand a finisher hog operation established in 2004 from 4196 (600 Animal Units) to 6294 (900 Animal Units) hogs.

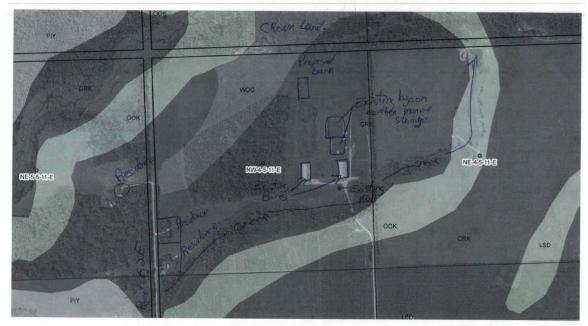
This will involve the following:

- Construction of one new barn.
- Using an existing provincially approved, engineered earthen manure storage facility.
- Consuming 57,834 litres of water per day from an existing well.
- Rendering of mortalities.
- Using the truck haul routes as shown on the 1st map below.



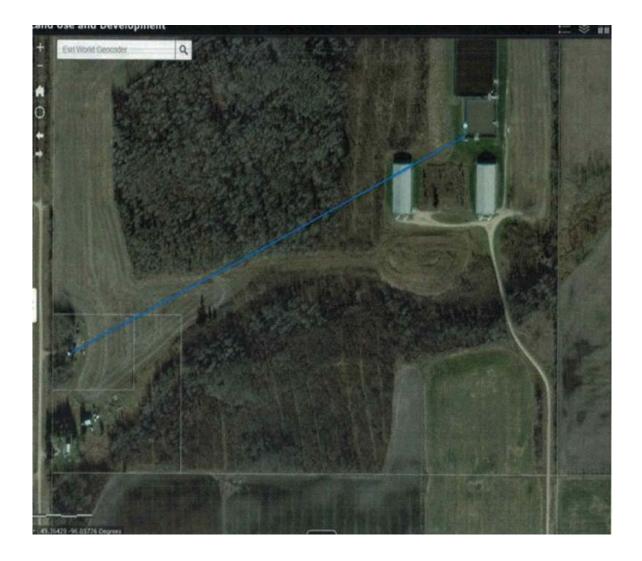
Site plan.

NA



J&D Grenier Farms Ltd.

Draft TRC Report



C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of TRC 12-056 - J&D Grenier Farm Ltd.:			
Items Provided by Project Proponent	Confirmed	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	Any barn (animal confinement facility) in excess of 6,458 sq. ft. each will require a building permit from the Office of the Fire Commissioner.	
 Proposed Project Site Physical Suitability 	x	According to reconnaissance soil survey, the proposed J&D Grenier Farms Ltd expansion is located on agriculture capability Class 3 and 4 soils.	
 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 <u>57,834</u> litres/day required for proposed operation	x	This project proposal has noted an estimated water usage that will exceed 25 000 litres per day, therefore a Water Rights Licence will be required. The proponent currently holds a Water Rights Licence for the existing project, but an Application to Construct a Well and Divert Groundwater will be required for the project expansion.	
6. Proposed measures to meet storage and application regulations for manure	x	The proponent is required by Section 4(a) of the Livestock Manure and Mortalities Management Regulation (LMMMR)to ensure sufficient storage capacity for all manure produced by the operation until it can be land applied, and may need to expand the existing manure storage facility in the future should issues with capacity occur. As prescribed by the LMMMR, a permit must be	SD

Provincial Technical Overview of TRC 12-056 - J&D Grenier Farm Ltd.:

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
		J&G Grenier must submit annual Manure Management Plans (MMP) in accordance with the LMMMR. Details on the requirements for manure management plans, including future soil sampling and analysis requirements, as well as design guidelines and application forms for manure storage facilities are available at: https://www.gov.mb.ca/sd/waste_management/livestock _program/index.html.	
7. Proposed Project Site with suitable mortalities disposal methods (rendering)	x	The proponent has indicated that mortalities will be dealt with by rendering. This is an acceptable disposal method under the LMMMR. Sustainable Development will be notified in the event of mass mortalities and disposal will then be managed either by burial on site or removal to an approved landfill site.	SD
8. Proposed Project Site with acceptable odour control measures	x	The proponent has indicated that a synthetic cover will be used on the earthen manure storage facility and there is an existing shelterbelt. These practices should reduce odour nuisance. 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
		The Planning Act allows Municipal Councils to require a manure storage cover and the planting of a shelter belt as a condition of approval.	MR
9. Proposed Project Site that meets development plan and zoning by-law requirements	x	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.	MR

Provincial Technical Overview of TRC 12-056 - J&D Grenier Farm Ltd.:

Items Provided by Project Proponent Confirmed		Related Existing Provincial Safeguards	
		The proposed livestock operation is on lands designated Rural Area 2 pursuant to the RM of Piney Development Plan By-Law No. 53/09. The proposal complies with Development Plan Policies 4.3.4.1.d.i. / 4.3.4.1.d.f. / 4.3.4.2 / 4.3.4.5 pertaining to the expansion of existing livestock operations.	
		The proposed livestock operation expansion is on lands zoned R2, Rural 2 Zone pursuant to the RM of Piney Zoning By-Law No. 122/2017. Livestock; expanding operations 299AU to a maximum of 1200AU is a conditional use within the R2 zone, and requires a minimum site area of 80 acres and a minimum site width of 600 ft. A conditional use order is required to permit this use.	
		According to the minimum setback requirements as stipulated in the Zoning By-law, the minimum separation distance between an earthen manure storage (EMS) of 801-1600AU and a residence is 2460 ft. The site of the existing lagoon and EMS is approximately 2240 ft. from the nearest residence, which is lower than the minimum requirement of 2460 ft. The RM may wish to verify this distance, and determine whether a variance order is required to vary the minimum distance between an EMS and a residence from 2460 ft. to \pm 2240 ft.	
 10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land 	x	Any use of the neighbouring Crown Land requires approval by Lands Branch. Please note the application identifies less than 1 mile from a provincial park and provincial forest. However this is not accurate as it is approx. 1.5 miles to a provincial forest and approximately 12 miles from a park.	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	x	The proposed J&D Grenier Farms Ltd operation has met the land requirements for 900 AU of finisher pigs. Additional information is available in the Appendix.	Ag
12. Proposed Spreadfields with sufficient minimum setbacks on	x	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	SD

Provincial Technical Overview of TRC 12-056 - J&D Grenier Farm Ltd.:

Items Provided by Project Proponent Confirmed		Related Existing Provincial Safeguards	
Spreadfields from natural features (water sources etc.)		entering surface and groundwater.	
13. Proposed Spreadfields that have been secured by spread agreements	x	The proponent has indicated that the land for manure application is either owned or under agreement with Moonshadow Holsteins Inc. Manitoba Agriculture took into consideration the entire livestock inventory to ensure there is enough land for both operations.	Ag
14. Proposed Spreadfields that meet development plan and zoning by- law requirements	x	All the proposed spreadfields are located in the RM of Piney, and are on lands designated Rural Area 1, Rural Area 2, and Limited Rural Area. They meet the intent of the RM of Piney Development Plan By-Law 53/09 Rural Area Policies. All the proposed spreadfields are on lands zoned Rural 1 Zone, Rural 2 Zone, and Limited Rural Zone, and complies with the RM of Piney Zoning By-Law 122/2017.	MR
15. Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	x	The proposed truck route utilizes the St. Labre market road that connects onto PR 220. We don't anticipate a substantial increase in use for the existing access. Please be advised that any structures placed within the controlled area of PR 210 (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 placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 210 requires permission from our regional office in Steinbach. Please contact the Acting Regional Planning Technologist (Robert Fender) at (204) 371-6858. In addition, please notify the Acting Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 210 (125 feet from the edge of the right-of-way).	MI
 Proposed trucking routes – local roads 	x	Under <i>The Planning Act</i> , municipalities as a condition of approval may require J & D Grenier Farms Ltd. to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes.	MR

17. Declared Provincial Waterways	х	No impacts to Provincial Waterways.	MI
--------------------------------------	---	-------------------------------------	----

Provincial Departments

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

D. PUBLIC COMMENTS & DISPOSITIONS

Public Comment Summary		
Adrien and Claire Grenier	 In favour Operation already exists at this location; expanding is obvious choice over moving operation Operation is in an agricultural area and fits well Will provide employment opportunities Will create more all-natural fertilizer to be made available to the surrounding farm land Existing operation has not be a deterrent to development in the area (recent development includes three houses, one cottage, and purchase and subdivision of lands) Owners have always strived to be good neighbours 	
Rudy and Carolyne Wiebe	 Concerns Concerned with increased use of St. Labre Road as operation's main access road. There is already an existing nuisance regarding the transport of products for these facilities. A new expansion will create additional dangerous road situations and increase need for road maintenance and repairs. The road was not constructed to handle heavy loads. The feed trucks and livestock haulers leave deep ruts in the road that make it difficult and dangerous for regular vehicles. Dust put up by large vehicles increases risk and danger for other drivers We would like the TRC to consider the following: Speed limits be lowered for heavy trucks and large farm equipment travelling the St. Labre Road to reduce dust Dust suppressant be applied on the two major curves on the proposed truck route Each resident on the proposed truck route be compensated by receiving 200 meters of dust suppressant 	

	 applied on the road in front of their residence Our seasonal cottage is just over 1 mile north of the existing operation and proposed expansion. Many days in the summer we are forced to remain inside the cottage because due to odour from the current operation. We are concerned that increasing the number of animal units by 50% will also increase the occurrence and severity of the problem. The assessment indicated that odour issues will be mitigated by use of a synthetic manure storage cover for the manure storage kit. We would like the TRC to consider: That protocols be put in place to guarantee manure storage cover is maintained and properly secured at all times.
Patrick and Rose-Marie	Concerns
Nakata	- Concerned with increased use of St. Labre Road as
	 operation's main access road. There is already an existing nuisance regarding the transport of products for these facilities. A new expansion will create additional dangerous road situations and increase need for road maintenance and repairs. We would like the Technical Review Committee to consider the following: Speed limits be lowered for heavy trucks and large farm equipment travelling the St. Labre Road to reduce dust Speed limit be decreased and dust suppressant be applied on the two major curves on the proposed truck route Each resident on the proposed truck route be compensated by receiving 200 meters of dust suppressant applied on the road in front of their residence
Rosaire Grenier	In favour
	 I agree they be allowed the expansion

A full copy of the public comments as well as the proponent's response may be viewed on the public registry at the following link

http://www.gov.mb.ca/mr/livestock/index.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.
- 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 Steinbach 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 Steinbach Community & Regional Planning Office); and
 - c) every person who made representation at the hearing.
- According to the minimum setback requirements as stipulated in the Zoning By-law, the minimum separation distance between an earthen manure storage (EMS) of 801-1600AU and a residence is 2460 ft. The site of the existing lagoon and EMS is approximately 2240 ft. from the nearest residence, which is lower than the minimum requirement of 2460 ft. The RM should verify this distance, and determine whether a variance order is required to vary the minimum distance between an EMS and a residence from 2460 ft. to ±2240 ft. Once verified, Council will require the proponent to apply for a variance.
- As per Section 169(4)(b) of The Planning Act, a copy of the notice of hearing to vary the separation distance involving a livestock operation must be sent to every owner of property located within the separation distance that is proposed to be varied.
- Note: That as per Section 174(1) of The Planning Act, Council can hold all required hearings together in a single combined hearing. It is recommended that during the course

of this public hearing, Council first deal with the matter of the rezoning, then the conditional use order followed by the variation order(s).

• As per Section 174(2) of The Planning Act the notice of hearing for each matter to be considered at a combined hearing may be combined into a single notice of hearing.

Council is welcome to contact Manitoba Sustainable Development 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

- If required, that a Variance be applied for prior to the Conditional Use Hearing to vary the separation distance from between the earthen manure storage structure to the nearest house. This will enable Council the option of holding a combined Conditional Use and Variation Hearing.
- That the proponent request the municipality hold a combined hearing, if desirable.

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	918-0325
Shannon Beattie	Sustainable Development	Policy Analyst Central Co-ordination Unit	945-3814
Jeff DiNella	Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	945-2664

Appendix A

Manitoba Agriculture

The proposed J&D Grenier Farms Ltd operation has met the land requirements for 900 AU of finisher pigs, as follows:

In areas of lower livestock intensity such as the RM of Piney, 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 J&D Grenier manure management plan to balance phosphorus with crop removal, should it be necessary in the future.

In order to determine the land requirements for the proposed operation, nitrogen and phosphorus excretion by 900 AU of 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 crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Piney.

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. Semi-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 3, 4 and 5. The limitations include stones (P), density (D), wetness (W) and droughtiness (M). Manure application is prohibited on Class 6, 7 and unimproved organic soils.

J&D Grenier Farms Ltd shares the land base with Moonshadow Dairy. Manitoba Agriculture staff reviewed the total livestock inventory and land base to ensure that there is sufficient suitable land for both operations. Manitoba Agriculture staff also conducted a site visit to confirm from the road that the spread fields are under corn or alfalfa.

J&D Grenier Farms is required to demonstrate that they have access to 1154 acres of suitable land for manure application. They have demonstrated that they have access to at least 1153 suitable acres for the pig manure that will not be needed for the manure generated by Moonshadow Holsteins Inc.

Appendix B Sustainable Development

Staff in the Water Science and Watershed Management Branch have reviewed the site assessment for the Grenier Farms proposal in the RM of Piney and have the following comments:

- 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 2002).
- The proponent plans to inject all manure. Injection of manure at appropriate rates poses lower environmental risk than other manure application methods.
- 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 cover the manure storage which will reduce N losses from the storage and also apply the liquid manure with injection which will reduce field N losses compared to broadcast methods.
- The proponent plans to use the existing two-cell lagoon for manure storage. When properly managed, a two-cell lagoon will allow for better utilization of manure nutrients. When application of nutrients is limited to crop requirements, there is a reduced risk of nitrogen and phosphorus loss to surface and groundwater.
- 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. To remain environmentally sustainable over a long-term planning horizon of 25 years or more, the proponent must be able to balance phosphorus inputs from applied manure and other nutrient sources such as commercial fertilizers with crop removal rates to avoid further build-up in soils. Consequently, sufficient land base must be available such that manure can be applied at no more than 1 times crop P removal rates (P balance). For long-term planning purposes, the proponent needs to have sufficient land available to ensure that manure can be applied at 1 times crop P removal. The proponent acknowledges that 1,585 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 1,153 acres for manure application. Application to meet crop N requirements is estimated to use 1,154 acres. Application at 2 times the crop removal of P is estimated to use 792 acres (1,585 acres is estimated to achieve P balance 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 site assessment identifies one production well on the property. However, the provincial water well database indicates that there are two other wells drilled on NW Section 4-5-11E that are associated with the property. Unused water wells on the site or spread fields must be properly sealed. A sealed well report must be filed with the Groundwater Management Section of Sustainable Development for each well sealed. Information on well sealing and the sealed well report are available from Sustainable Development (204-945-6959) or: https://www.gov.mb.ca/sd/water/groundwater/wells_groundwater/wells_groundwater/index.html. All but the most basic wells should be sealed by a well drilling professional. A list of currently licensed well drilling professionals can also be accessed from the above web page.
- All groundwater features, including water wells, should be given as a minimum, the buffer outlined in the regulations during manure application.