



TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT
PREPARED FOR

THE RURAL MUNICIPALITY
OF
RITCHOT

RED PLAIN FARMS INC.

SE¹/₄13-7-3 EPM

TRC 12-050

December 20, 2018

A. INTRODUCTION – THE TEAM

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

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

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

THE REPORT (TRC Process Box 17)

Prime Purpose of TRC Reports

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

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

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

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

THE PROCESS

TRC Process Chart with actual pertinent dates and brief overview:

B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to:

<http://www.gov.mb.ca/mr/livestock/index.html>

Applicant: Red Plain Farms Inc.

Site Location: SE¼ 13-7-3 EPM, approximately 2 miles (3.2 km) south of the community of Niverville, on the north side of PR 305. Refer to map below.

Proposal: To expand the current Grower/Finisher hog operation from 2500 animals (358 Animal Units) to 5000 animals (715 Animal Units) within an animal confinement facility.

This will involve the following:

- Construction of an 88 ft. x 250 ft. addition on to the existing barn
- No change to earthen manure storage facility as the existing manure storage has sufficient storage capacity for the expansion.
- No existing buildings are to be demolished or replaced
- Maximum daily water consumption for the operation is 16,500 imperial gallons (from existing onsite well)
- Rendering mortalities; No composting on site
- Using the truck haul routes as shown in the maps below

The Technical Review Process: TRC-12-050 –Red Plain Farms Inc.



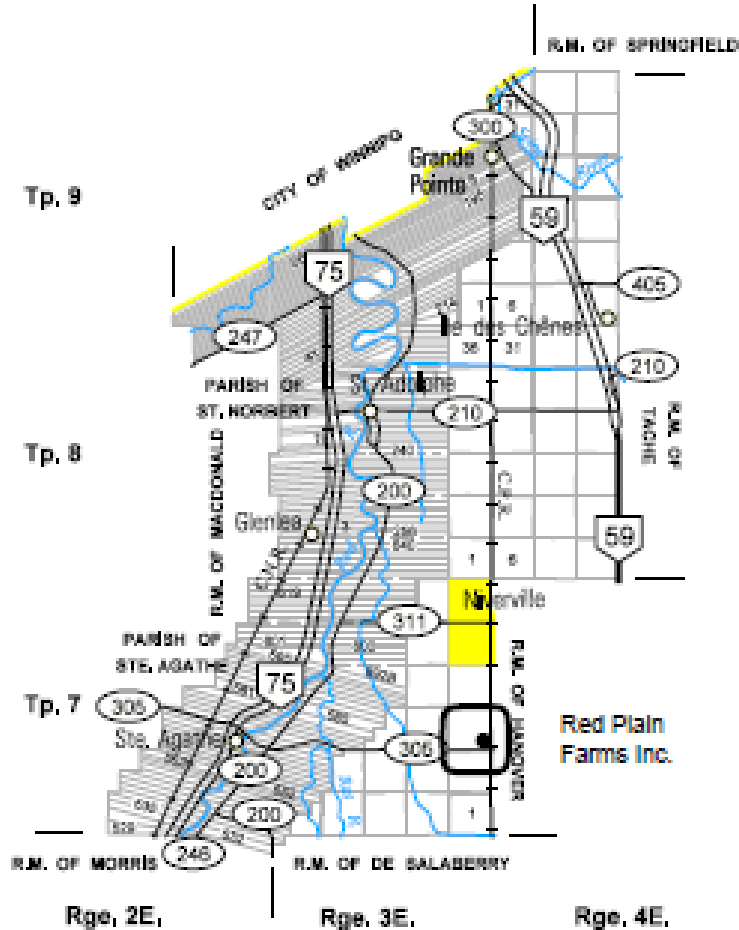


R.M. OF RITCHOT

PROVINCE OF MANITOBA
INFRASTRUCTURE
HIGHWAY PLANNING AND DESIGN BRANCH
GEOGRAPHIC & RECORDS MANAGEMENT SECTION
WINNIPEG
JANUARY 2015

LEGEND

PROVINCIAL TRUNK HIGHWAYS		ACCESS ROADS	
PROVINCIAL ROADS		RAILWAYS	



SHEET 1 of 1



Red Plain Farms – Site Location



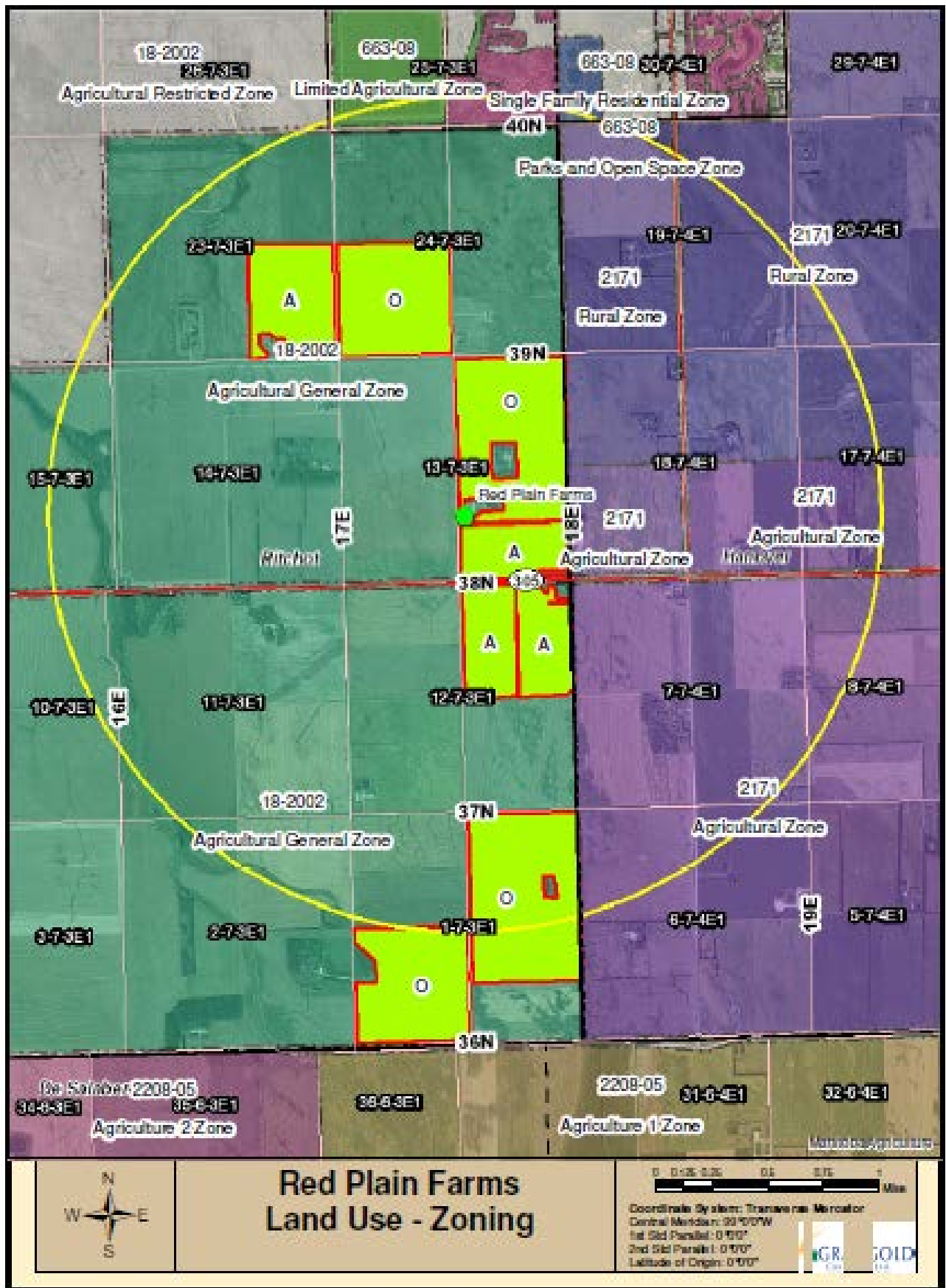
Site Plan - Red Plain Farms Inc.



Truck Haul Route

Red Plain Farms - Spread Field Boundaries





C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of TRC 12-050 Red Plain Farms Inc.:			
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 in excess of 6,458 sq. ft. each will require a building permit from the Office of the Fire Commissioner.	MR
3. Proposed Project Site Physical Suitability	X	Detailed soil survey indicates that Red Plain Farms Inc. is located on prime agricultural land mapped as Agriculture Capability Classes 2 and 3.	Ag
4. Proposed Project Site Flood Risk Potential	X	This site is prone to flooding by the Red River, and is within the Red River Valley Designed Flood Area. All new permanent structures will require a designated flood area permit from Manitoba Infrastructure and must be provided with permanent flood protection to the 1:200-year flood protection level. 1:200-year flood protection level for this site is 236.98 metres (777.5 feet) CGVD28.	MI
5. Identified 16,500 imperial gallons /day required for proposed operation	X	Based on our understanding of the proposed facility, this project will require a Water Rights Use Licence issued under The Water Rights Act. The proponent will need to submit an “Application to Construct a Well and Divert Groundwater”, under “The Water Rights Act.” The proponents must apply either through the website at http://www.gov.mb.ca/sd/waterstewardship/licensing/wlb/obtaining.html or by contacting us at Box 16 - 200 Saulteaux Crescent, Winnipeg MB, R3J 3W3; 204-945-3983, or toll free at 1-800-214-6497.	SD

Provincial Technical Overview of TRC 12-050 Red Plain Farms Inc.:

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
6. Proposed measures to meet storage and application regulations for manure	X	<p>Correction to Section 8.3: the permit number for the existing manure storage facility is LM-0603-M01</p> <p>The original application to construct the manure storage facility indicated it “was sized for a future expansion to 5000 feeder hogs.” Compliance and Enforcement Branch has no concerns at this time with the continued use of the existing manure storage facility.</p> <p>Red Plain Farms Inc. must submit annual Manure Management Plans (MMP), as prescribed under the Livestock Manure and Mortalities Management Regulation (LMMMR). Any applicable permit or annual submissions under the LMMMR would be processed by Environmental Approvals Branch of Sustainable Development. Details on the requirements for manure management plans, including future soil sampling and analysis requirements, are available at www.gov.mb.ca/sd/envprograms/livestock.</p>	SD
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. Mass mortalities will be managed either by burial on site or hauling to the Brady landfill.	SD
8. Proposed Project Site with acceptable odour control measures	X	The proponent has indicated that, in order to reduce odour and nitrogen losses from the earthen manure storage, a straw cover is applied to the primary cell. There is also an existing shelterbelt that will remain. 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.	Ag

Provincial Technical Overview of TRC 12-050 Red Plain Farms Inc.:

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
9. Proposed Project Site that meets development plan and zoning by-law requirements	X	<p>The proposed site is designated as “General Agricultural”, and generally meets the intent of the Macdonald-Ritchot Planning District Development Plan’s relevant livestock policies 4.4.1 and 4.4.2.</p> <p>The R.M. of Ritchot Zoning By-law zones the proposed area as “AG” Agricultural General.</p>	MR
10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.	X	<p>The distance of the project exceeds 1 mile from any parcel of Crown land which would include a Provincial Park, Wildlife Management Area, Ecological Reserve, Provincial Forest, and Wildlife Refuge/ Sanctuary. The Lands Branch has no objection to the proposal.</p>	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	<p>Red Plain Farms Inc. is required to demonstrate that they have access to 779 acres of suitable land for manure application. Red Plain Farms has satisfied the Provincial land requirement by providing 1101 suitable acres. A detailed explanation of the land assessment can be found in Appendix A.</p> <p>All of the manure will be applied as a fertilizer for crop production. The operation currently registers annual manure management plans with Sustainable Development prior to manure application. If the services of a manure management planner are used, the planner must be a Professional Agrologist or Certified Crop advisor and must have successfully completed training in manure management planning delivered by the Assiniboine Community College.</p> <p>The proponent has indicated that a commercial manure applicator will be used. Commercial manure applicators must be trained and licensed in Manitoba. The training is delivered by the Assiniboine Community College and licensing is through Manitoba Agriculture.</p>	Ag
12. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from natural features (water sources etc.)	X	<p>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. Special care should be taken to insure that manure is not applied within the first order drain on SW 1-7-3E.</p>	SD

Provincial Technical Overview of TRC 12-050 Red Plain Farms Inc.:

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
		<p>The Draft Report identifies no well on the property. However, the provincial water well database indicates that there was one production well drilled on the SE of Section 13-07-03E. There were also other wells present within the spread field boundaries. If there are unused water wells on the site or spread fields these shall 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: http://www.gov.mb.ca/sd/waterstewardship/water_quality/wells_groundwater/index.html. Refer to Appendix B.</p>	
13. Proposed Spreadfields that have been secured by spread agreements	X	The proposal indicates that Red Plain Farms Inc. owns 725 of the 1101 acres available for manure. Land agreements have been provided for the remaining 376 acres.	Ag
14. Proposed Spread fields that meet development plan and zoning by-law requirements	X	All spread fields are located in agri-related designated and zoned areas.	MR
15. Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	X	<p>The proposed truck route utilizes an existing Government Road Allowance that connects onto PR 305. We don't anticipate a substantial increase in use for the existing access.</p> <p>Please be advised that any structures placed within the controlled area of PR 305 and the Niverville Access Road (road from PR 305 to Niverville, east side of tracks) (125 feet from the edge of the right-of-way) require a permit from our office. The contact is Sheena del Rosario at (204) 945-3457.</p> <p>The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 305 the Niverville Access Road 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</p>	MI

Provincial Technical Overview of TRC 12-050 Red Plain Farms Inc.:			
Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
		within the controlled area of PR 305 and the Niverville Access Road (125 feet from the edge of the right-of-way).	
16. Proposed trucking routes – local roads	X	The proposed development is accessed by government road allowances and has frontage onto PR 305. Under The Planning Act, municipalities as a condition of approval may require the proponent to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes	MR
17. Declared Provincial Waterways	X	Several of the spread fields are adjacent to the D-20 Drain and Tourond Creek, which have been designated as Provincial Waterways. Provincial Waterways are subject to Section 14 of the Water Resources Administration Act, which states: “No person shall place any material on, remove any material from, or construct, carry out, reconstruct, establish, or place, any works or structures on, over, or across, a provincial waterway, except as may be authorized in writing by the minister and subject to such terms and conditions as the minister may prescribe.” Water Management and Structures requires a Provincial Waterway Authorization be obtained for any development crossing or along a Provincial Waterway, including the use of temporary manure hoses.	MI

Provincial Departments

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

D. PUBLIC COMMENTS & DISPOSITIONS

N/A

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 Portage La Prairie 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;and
 - b) 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 Portage La Prairie Community & Regional Planning Office); and
 - c) every person who made representation at the 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

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

Appendices

Appendix A

Land Base Requirements for Red Plain Farms Inc. Clay Sawka and Petra Loro Manitoba Agriculture December 2018

In areas of lower livestock intensity such as the RM of Ritchot, 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. In areas of high livestock intensity, specifically the RMs of Hanover and La Broquerie, the proponent must balance phosphorus excretion by the livestock with crop phosphorus removal over the long-term. The land requirement calculation takes into consideration typical nutrient excretion rates for pigs as well as realistic, long-term crop yields from the Manitoba Agricultural Services Corporation (MASC) for Risk Area 12, Soil Types C and D.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. Soil tests must be below 60 ppm Olsen P to be considered suitable. According to detailed soil survey, the agriculture capability of the land included in the proposal is predominantly Class 2 to 3. Class 2 to 3 soils are prime agricultural lands and are suitable for manure application. The associated limitations include wetness (W). According to the above land calculation, Red Plain Farms is required to demonstrate that they have access to 779 acres of suitable land for manure application. Red Plain Farms has satisfied the Provincial land requirement by providing 1101 suitable acres.

Appendix B

Manitoba Sustainable Development

Staff in the Water Science and Watershed Management Branch have reviewed the Site Assessment for Red Plains Farms Inc. in the RM of Ritchot 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 reducing ammonia-N losses through the use of straw cover on the primary cell and by applying the manure with injection rather than a broadcast method.
- 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. Special care should be taken to insure that manure is not applied within the first order drain on SW 1-7-3E.
- 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 1,357 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 1,101 acres for manure application. Application to meet crop N requirements is estimated to use 779 acres (1,357 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 Draft Report identifies no well on the property. However, the provincial water well database indicates that there was one production well drilled on the SE of Section 13-07-03E. There were also other wells present within the spread field boundaries. If there are unused water wells on the site or spread fields these shall 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: http://www.gov.mb.ca/sd/waterstewardship/water_quality/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.