

# **TECHNICAL REVIEW COMMITTEE**

# A TECHNICAL REVIEW REPORT PREPARED FOR

# THE RURAL MUNICIPALITY OF CARTIER

# ROSEDALE COLONY-HOG BARN DEVELOPMENT

SE <sup>1</sup>⁄<sub>4</sub> 36-11-3 WPM SW <sup>1</sup>⁄<sub>4</sub> 31-11-2 WPM TRC 12 – 028

June 8, 2017

## 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
- Indigenous and Municipal Relations (IMR); Community Planners
- Infrastructure (MI); Development Review Technologists, Engineering and Operations Division; Development Review Officers, Water Management and Structures Division
- Sustainable Development (SD); Technical Review Officer, Soils Specialist, Environmental Engineer, Environment Officer, Habitat Mitigation Biologist, Regional Wildlife Manager, Nutrient Management Regulation Supervisor, Groundwater Specialist, Water Rights Licensing Manager and Resource Planner

and

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

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

### THE REPORT (TRC Process Box 17)

#### Prime Purpose of TRC Reports

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

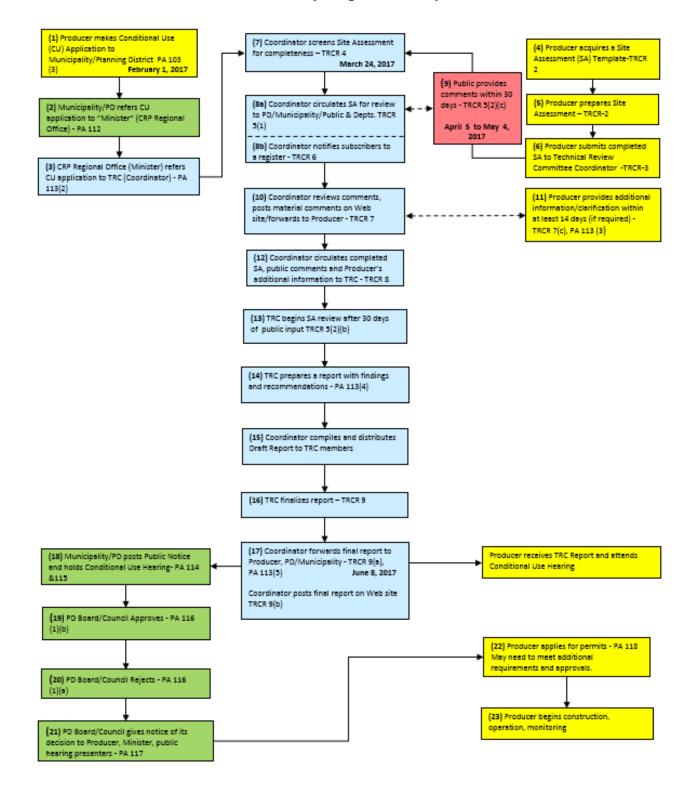
- a) Enable municipal councils to make informed Conditional Use Permit decisions;
- b) Create a common stakeholder understanding of a livestock proposal, potential impacts and related regulatory requirements and safeguards;

- c) Provide a vehicle/forum that enables the sharing of public concerns and proponent responses;
- d) Offer recommendations to both municipal councils and proponents; and
- e) Represents the fulfillment of the TRC's role as per 116(1)(b)(i) of The Planning Act – to determine, based on available information, that the proposed operation will not create a risk to health, safety or the environment, or that any risk can be minimized through the use of appropriate practices, measures and safeguards

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

#### The Technical Review Process:

TRC-12-028 Rosedale Colony - Hog barn Development



**Rosedale Colony-Hog Barn Development** 

## **B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION**

To view a detailed description, go to www.gov.mb.ca/ia/programs/livestock/public\_registries.html

Applicant:Rosedale Colony – Hog Barn DevelopmentSite Location:Approximately 2 miles south east of the Community of St. Eustache at

SE ¼ 36-11-3 WPM and SW ¼ 31-11-2 WPM. Approximately ¾ mile east of PR 246. Refer to map below.

**Proposal:** To expand a current Farrow to Finish Hog operation from 600 sow (750 AU) to 1,000 sow (1250 AU) inclusive of replacing existing buildings. An Animal Confinement Facility is used for the existing component of the operation.

This will involve the following:

- Existing north finisher barn to be utilized until useful life has been expended.
- Construction of a new sow barn is proposed, to be expanded to replace the finishing space in future.
- Planting a shelterbelt around the barn
- Consuming a maximum total of 48,516 imperial gallons of water per day from an existing onsite well
- Composting mortalities; A plan for composting mass mortalities in place if necessary
- Using the truck haul routes as shown below



Site Location and Truck Haul Routes

## **C.SITE ASSESSMENT OVERVIEW**

#### **Assessment Overview Table**

Provincial Technical Overview of:			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
<ol> <li>Submitted complete Site Assessment</li> </ol>	x	<ul> <li>The proposal is consistent with Provincial requirements for pig developments under the Pig Production Special Pilot Project. The Pilot Project holds pig operations to a higher standard than any other type of livestock operation in Manitoba. It requires new and expanding pig operations to: <ul> <li>be located outside of Hanover and La Broquerie,</li> <li>construct a 2-cell manure storage facility,</li> <li>demonstrate access to sufficient suitable land to balance manure phosphorus with crop phosphorus removal,</li> <li>inject or immediately incorporate manure that is applied to <i>tilled</i> land, and</li> <li>maintain soil test levels below 60 ppm Olsen P for the life of the operation.</li> </ul> </li> </ul>	IMR
<ol> <li>Clearly defined the project as a</li> <li><u>X</u> Animal Confinement Facility</li> </ol>	x	Two new barns are proposed. A new sow barn is to be constructed to replace the finishing space in the future. Agricultural buildings such as barns over 600 meters (6,458 sq ft) as proposed in this project, require a building permit from the Office of The Fire Commissioner under <i>The Buildings and Mobile Homes Act</i> <i>and the Manitoba Building Code</i> .	IMR
3. Proposed Project Site Physical Suitability	x	Manitoba Agriculture staff visited the Colony on May 5, 2017 specifically to look at the proposed barn site and the adjacent oxbow lake (Rosedale Loop). At that time, the fields were dry and in ideal condition for seeding. The oxbow lake going through the yard site is very well buffered with trees and shrubs (see photos in Appendix A).	Ag
4. Proposed Project Site Flood Risk Potential	x	Water Management, Planning and Standards is not aware of any major overland flooding risk at this location. However, several of the manure spreading sites are adjacent to Provincial Waterways. If Provincial Waterways are to be crossed by temporary manure hose, a Provincial Waterways Authorization must first be obtained from Manitoba Infrastructure, Water Management, Planning and Standards branch.	MI
5. Identified 48,516 imp 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."	SD

Provincial Technical Overview of:			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
6. Proposed measures to meet storage and application regulations for manure	x	If CU approval is obtained, additional reviews will take place for environmental protection: namely annual manure management plans. The operation is required to register manure management plans which includes annual soil testing. The manure management plans are reviewed by Branch staff for regulatory compliance. The operation proposes to use the existing manure storage facility and therefore will not apply for a permit for construction/expansion of the manure storage facility. However, a permit will be required to pipe the new barn into the existing manure storage facility.	SD
7. Proposed Project Site with suitable mortalities disposal methods (rendering)	x	The operation proposes to compost mortalities. Composting is an approved method under the Livestock Manure and Mortalities Management Regulation.	SD
8. Proposed Project Site with acceptable odour control measures	x	Rosedale Colony has indicated that they will use existing shelterbelts for odour control. Should odour become a problem for neighbouring residents, there is a complaints process under <i>The</i> <i>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. <i>The Act</i> 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.	IMR
9. Proposed Project Site that meets development plan and zoning by-law requirements	x	The site is appropriately designated Rural General Policy Area in the White Horse Plains Planning District Development Plan No. 1- 2016 and is zoned "AG" Agricultural General in the RM of Cartier Zoning By-Law No. 1620-11. A Conditional Use Order is required for Livestock Operations of 300 A.U. or more in the "AG" Agricultural General zone of the RM of Cartier Zoning By-Law No. 1620-11. A Variation Order is required to vary the mutual separation distance of a minimum of 9,055 feet to ~ 5,240 feet from the designated residential area east of St. Eustache and south of Fort Rouge Road as shown in the White Horse Plains Planning District Development Plan, By-Law No. 1-2016.	IMR

Provincial Technical Overview of:			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.	x	No wildlife related concerns. Be advised that Land Management & Planning Section has reviewed the information provided and based on the presented information has no concerns as no Crown Lands are proposed for use.	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	In order to determine the land requirement, nitrogen and phosphorus excretion by the livestock are compared to nitrogen utilization and phosphorus removal by the crops. The calculation takes into consideration typical, modern feeding practices for livestock production and realistic, long-term crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Cartier. In the RM of Cartier, pig operations are required to demonstrate access to sufficient suitable land for all of the phosphorus excreted by the pigs (3983 acres). The land requirement for all other livestock species is half of the phosphorus excreted by the livestock species is half of the phosphorus excreted by the livestock (467 acres). As such, Rosedale Colony is required to demonstrate that they have access to at least 4450 acres for manure application. Rosedale Colony has demonstrated that they have access to 4978 suitable acres for manure application. This exceeds the current land requirement. Rosedale Colony has also demonstrated that they have an additional 721 acres for manure application that have yet to be soil tested. Land suitability was 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. According to detailed and reconnaissance soil survey, the agriculture capability of the land included in the proposal varies primarily from Class 1 to 3 with small areas of Class 5, all of which is also considered suitable. The limitations include wetness (W), density (D), salinity (N), moisture (M) and inundation (I).	Ag
12. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from natural features (water sources etc.)	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 and observed by those involved in manure application to minimize the risk of nutrients entering surface waters.	SD

Provincial Technical Overview of:			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
13. Proposed Spreadfields that have been secured by spread agreements	х	Rosedale Colony has indicated that they own all of the lands included in the proposal.	Ag
14. Proposed Spreadfields that meet development plan and zoning by-law requirements	х	All identified spread fields are compliant with their respective designations and zones. All spread fields are designated Rural General except for the S½ of SE¼ 35-11-3W which is designated Rural Limited Policy Area in the White Horse Plains Planning District Development Plan By-Law No. 1-2016 and all are zoned "AG" Agricultural General except the S½ of SE¼ 35-11-3W which is zoned "AL" Agricultural Limited zone in the RM of Cartier Zoning By-Law No. 1620-11. Part IV Section 16.9.5 Manure Management Plans Proponents, owners or operators of approved new or expanding Livestock Operations involving the production of 300 A.U. or more shall submit a copy of the manure management plan to the RM of Cartier upon request.	IMR
15. Proposed trucking routes and access points that do not impact Provincial Roads or Provincial Trunk Highways	х	<ul> <li>We have no concerns with this proposal. However, we do recommend that all buildings within the controlled area of PR 424 be legalized.</li> <li>There appears to be buildings located within the controlled area of PR 424 (there is a 125 feet controlled area from the edge of the Right-of-Way to which all structures etc. need to have a permit). All the applicant has to do is apply to MI for these permits. The contact is Sheena del Rosario at (204) 945-3457.</li> </ul>	
16. Proposed trucking routes – local roads	х	PR 424 and PR 248 are the proposed trucking routes. Under The Planning Act, Municipalities as a condition of approval may require Rosedale Colony to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes.	IMR

Provincial Departments:

- Ag Agriculture
- IMR Indigenous and Municipal Relations
- MI Infrastructure
- SD Sustainable Development

## **D. PUBLIC COMMENTS & DISPOSITIONS**

No comments received

## **E. CONCLUSIONS & RECOMMENDATIONS**

#### **Overall Conclusion**

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

#### **Recommended Actions to Council**

- As per Section 114(1) of The Planning Act, Council must set a date for a Conditional Use hearing which must be at least 30 days after it receives this report
- As per Section 114(2) of The Planning Act, at least 14 days before the date of the hearing, Council must:
  - a) send notice of the hearing to
    - (1) the applicant,
    - (2) the minister, (c/o the 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;
- 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 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's Technical Review Officer with Environmental Approvals Branch as well as regional Environmental Compliance and Enforcement staff to discuss environmental compliance issues, if applicable, with respect to the Livestock Manure and Mortalities Management Regulation (M.R. 42/98).

#### **Recommended Actions to Proponent**

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

## F. TECHNICAL REVIEW COMMITTEE MEMBERS

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

#### Appendix A Manitoba Agriculture Site Visit May 5, 2017 Clay Sawka and Petra Loro

Manitoba Agriculture staff visited the Colony on May 5, 2017 specifically to look at the proposed barn site and the adjacent oxbow lake (Rosedale Loop). At that time, the fields were dry and in ideal condition for seeding. The oxbow lake going through the yard site is very well buffered with trees and shrubs.

During the site visit, Colony representatives specifically inquired about required setbacks from the oxbow to the barn. According to the RM of Cartier Zoning By-law No. 1620-11 under Section 17.21 Special Setbacks, any structure must be at least 100 feet from the top of bank line of a watercourse. Other considerations with respect to the placement of the barn are access, biosecurity and proximity to the manure storage facility.



Site of proposed barn with buffered oxbow lake in background.



Rosedale Colony earthen manure storage facility with oxbow in background.

#### Appendix B

#### LIVESTOCK TECHNICAL REVIEW COMMITTEE

#### SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:	Rosedale Colony
PROPOSAL NAME:	Rosedale Colony-Hog Barn Development
TYPE OF OPERATION:	1554 Mixed
RURAL MUNICIPALITY:	Cartier
<b>OPERATION LOCATION:</b>	SE 36-11-3 WPM AND SW 31-11-2 WPM

#### Environmental Stewardship Division; Environmental Approvals Branch

If CU approval is obtained, additional reviews will take place for environmental protection: namely annual manure management plans. The operation is required to register manure management plans which includes annual soil testing. The manure management plans are reviewed by Branch staff for regulatory compliance.

The operation proposes to use the existing manure storage facility and therefore will not apply for a permit for construction/expansion of the manure storage facility. A permit will be required for the pipeline from the new barn into the existing manure storage facility.

The operation proposes to compost mortalities. Composting is an approved method under the Livestock Manure and Mortalities Management Regulation.

The proponent has indicated a maximum daily water use of 48,516 imperial gallons per day.

## Environmental Stewardship Division; Environmental Compliance & Enforcement Branch, Central Region

Manitoba Sustainable Development, Winnipeg Regional Office of Environmental Compliance and Enforcement Branch has reviewed the above noted Livestock expansion for the proposed increase from 600 sows (farrow to finish) to 1,000 sows (farrow to finish), and has the following comments to provide:

1. Manitoba Sustainable Development has no record or permit for the existing steel/concrete tank indicated on Page 7 of the proposal. Rosedale Colony may be required to register this tank with the Manitoba Sustainable Development.

2. Environmental Compliance and Enforcement Branch intends to inspect in the near future. Biodiversity & Land Use Division; Wildlife & Fisheries Branch; Habitat, Biodiversity & Endangered Species section

No wildlife related concerns.

Parks and Regional Services Division; Central Region

• No comment.

#### Water Stewardship Division; Water Science & Management Branch

Staff in the Water Science and Watershed Management Branch have reviewed the site assessment for Rosedale Colony in the RM of Cartier and have the following comments:

- 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 and observed by those involved in manure application to minimize the risk of nutrients entering surface waters.
- 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 the livestock manure. Manure applications should not occur to saturated, frozen or snow covered soils or when heavy rainfall is expected within 24 hours. Manure applications are best completed by mid-October or earlier as manure applied shortly before freeze up is more susceptible to nutrient runoff losses during spring snowmelt than if the manure is applied earlier in the fall.
- 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 of25 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 I times crop removal rates. In addition, under the Hog Production Pilot project, new and expanding pig operations must have access to sufficient suitable land to accommodate all of the phosphorus generated by the operation. Therefore, the proponent has acknowledged that up to 4,917 acres may be required to ensure the long term environmental sustainability of the operation.
- All unused and abandoned wells on the site and spread fields should be properly sealed.

A sealed well report should be filed with the Groundwater Management Section of Sustainable Development for each well sealed. Information on well sealing is available from Sustainable Development (204-945-6959) or: http://www.gov.mb.ca/conservation/ waterstewardship/water info/mise/abandoned wells.pdf. It is recommended that all but the most basic wells should be sealed by a well drilling professional. A list of currently licensed located well drilling professionals is http://www.gov.mb.ca/conservation/ waterstewardship/water quality/wells groundwater/well drillers.html.

- During manure application all groundwater features, including water wells, should be given as a minimum, the amount of buffer as outlined in the regulations.
- Note that the Well Standards Regulation under the *Groundwater and Water Well Act* requires a 100 metre separation distance between newly constructed wells and confined livestock areas.

#### Water Stewardship Division; Water Use Licensing Branch; Groundwater Licensing section

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."

## Biodiversity & Land Use Division; Lands Branch; Provincial & Regional Land Management Planning section

Be advised that Land Management & Planning Section has reviewed the information provided and based on the presented information has no concerns as no Crown Lands are proposed for use.

#### PREPARED BY:

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