

TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT PREPARED FOR

THE RURAL MUNICIPALITY OF DUFFERIN

ROSE VALLEY COLONY

22-6-6 WPM

TRC 12-064

April 3, 2020

A. INTRODUCTION – THE TEAM

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

Agriculture and Resource Development (ARD)

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

Conservation and Climate (CC)

- Environment Officer
- Environmental Engineer
- Water Rights Licensing Technologist

Infrastructure (MI)

- Development Review Technologists
- Engineering and Operations Division
- Development Review Officers
- Water Management and Structures Division

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

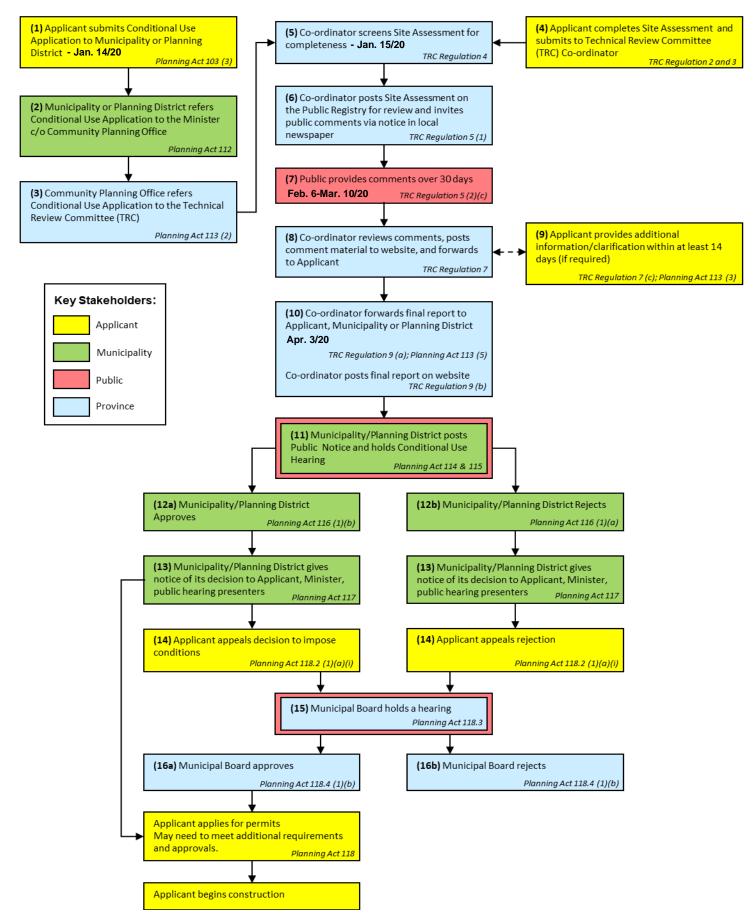
To provide objective, credible, technically-based assessments that:

- a) Enable municipal councils 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, 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

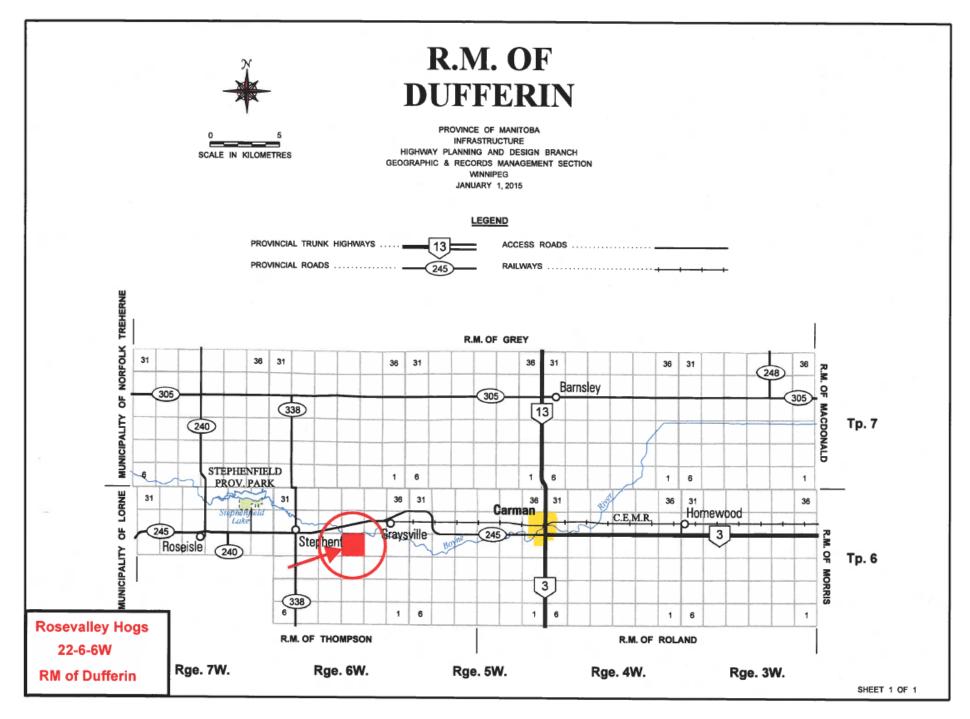
Applicant: Rose Valley Colony

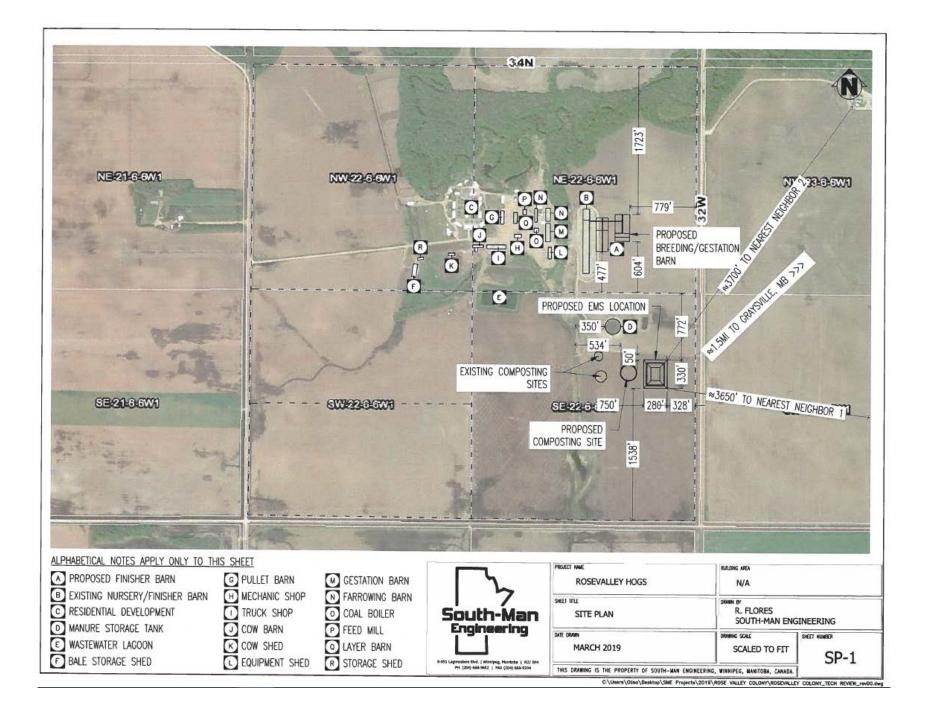
Site Location: 22-6-6 WPM. Refer to map below.

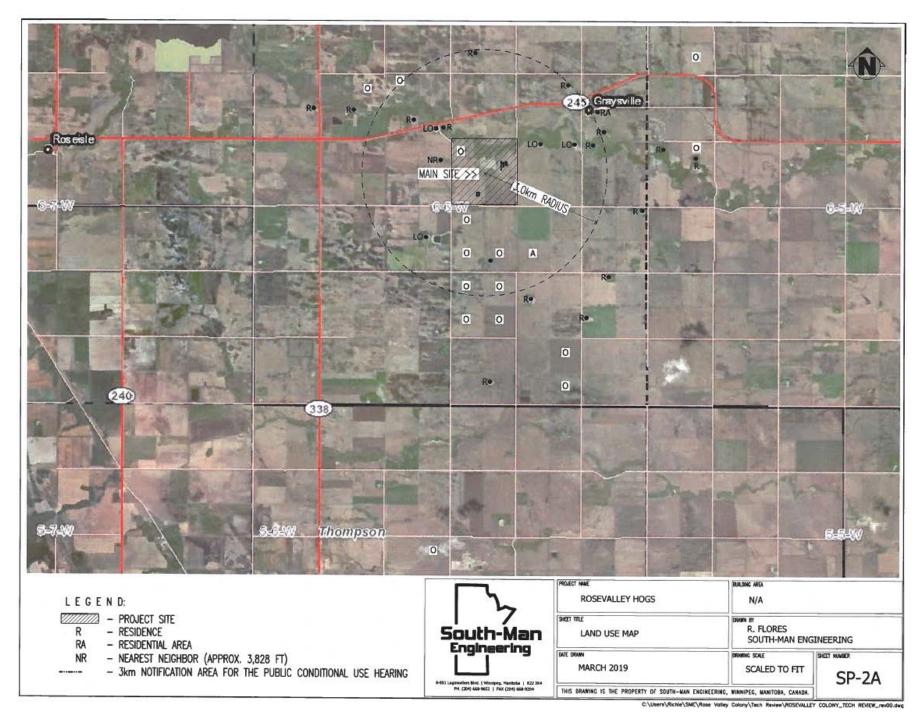
Proposal: To expand the current mixed livestock operation from 800 to 1,400 sows: farrow to finish, 5,000 to 10,000 pullets, 10,000 to 20,000 layers, and 5 to 10 mature cows (bringing the operation's animal units from 1,110 to 1,959).

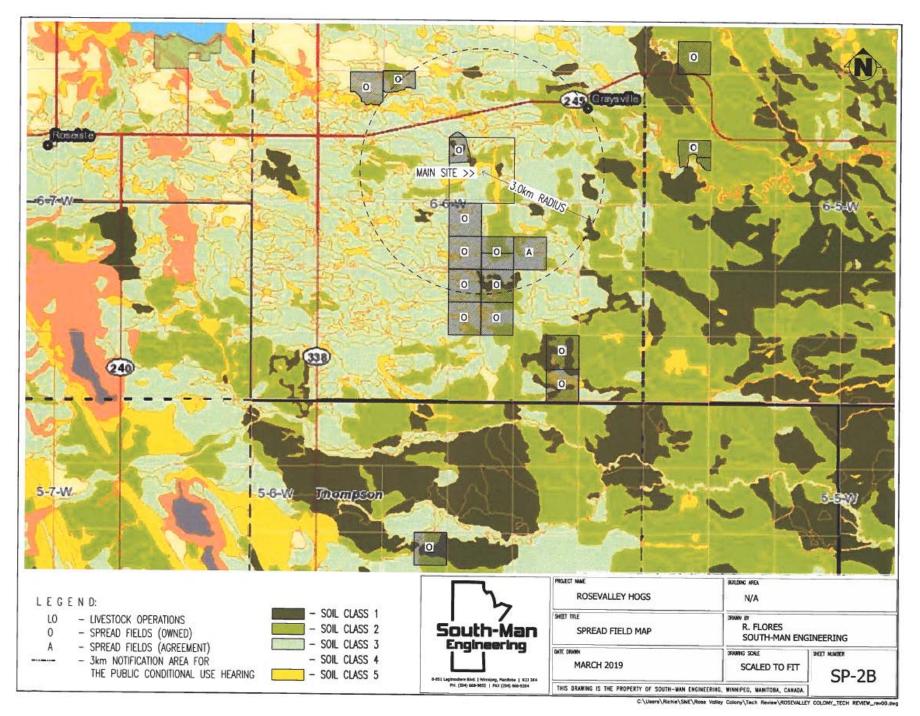
This will involve the following:

- Use of existing barns and construction of four new barns
- Manure storage using earthen storage, field storage, and a concrete tank (254 day holding capacity for tank storage)
- Consumption of up to 58,045 imperial gallons of water per day from an order 5 drain (tributary of La Salle River)
- Composting and rendering mortalities
- Truck haul routes as shown in map below

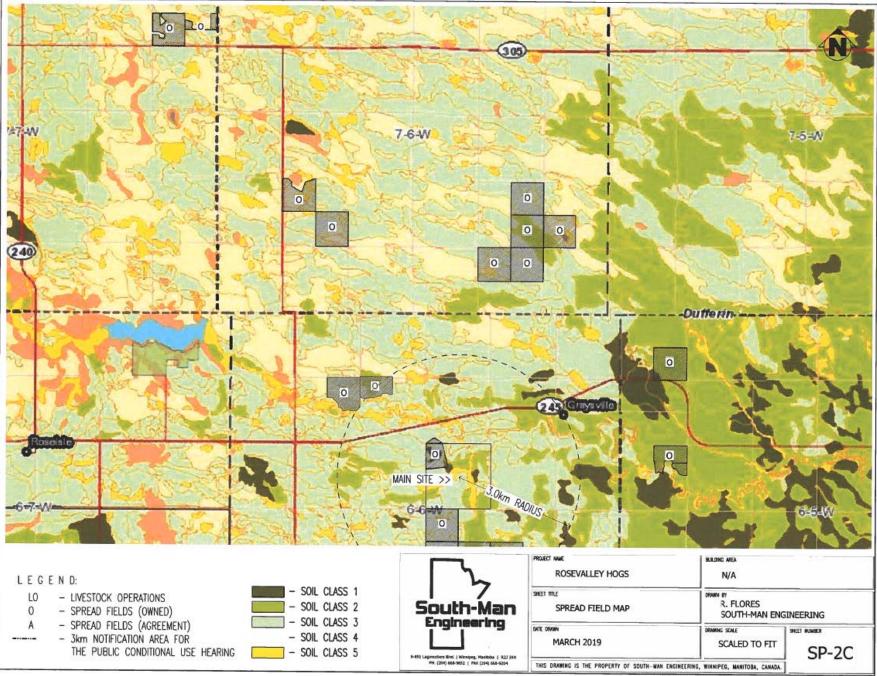


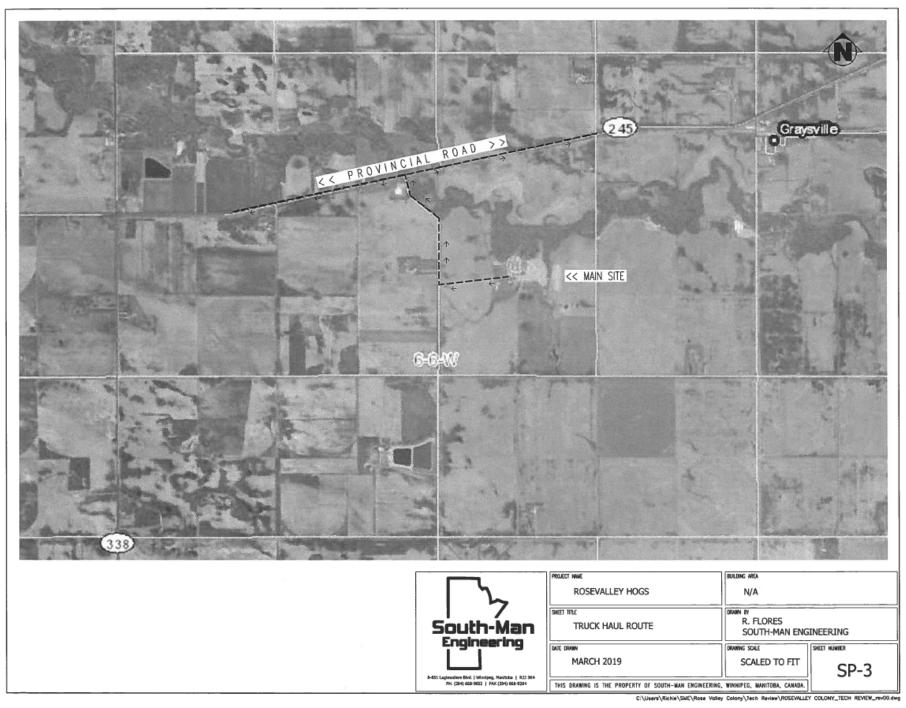






Rose Valley Colony (TRC 12-064)





C. SITE ASSESSMENT OVERVIEW

	Provincial Technical Overview of TRC 12-064 – Rose Valley Colony				
ltem 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	The proponent is requesting approval to expand the pig and poultry operations from 800 sows, farrow to finish (1000 Animal Units) to 1400 sows, farrow to finish (1750 Animal Units); 10,000 layers (83 Animal Units) to 20,000 layers (166 Animal Units) and 5,000 layer pullets (17 Animal Units) to 10,000 layer pullets (33 Animal Units).	ARD	
3	Project clearly defined as an animal confinement facility.	x	The proponent has ten (10) barns. Finisher Barn; 2 Nursery Barns; Pullet Barn; Cow Barn; 2 Gestation Barns; Farrowing Barn; and Layer Barn *see Site Assessment Form for structural footage	сс	
			Each of the barns being proposed are in excess of 6,458 sq. ft. (600 sq.m) and will therefore require a building permit from the Office of the Fire Commissioner under <i>The Building and Mobile Home Act</i> and the Manitoba Building Code.	MR	
4	Identified all existing and proposed buildings and structures and related separation distances	X	The actual distance from the earthen manure storage to a residence is 3,650 feet and at 1,959 animal units, the required minimum separation distance is 4,594 feet. A variation order is required to vary the minimum separation distance from 4,594 feet to 3,650 feet. The actual distance from the earthen manure storage to a designated area (Graysville) is 7,920 feet and at 1,959 animal units the required minimum separation distance is 9,186 feet. A variance order is required to vary the minimum minimum separation distance from 9,186 feet to 7,920 feet.	MR	
5	Demonstrated project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone	Х	No person shall construct, install, site, locate, expand or modify a confined livestock area or manure storage facility in Nutrient Management Zone N4 or in a Nutrient Buffer Zone according to the Nutrient Management Regulation (M.R. 62/2008) under The Water Protection Act. The project site is not located within Nutrient Management Zone N4 or any Nutrient Buffer Zone.	ARD	

Provincial Technical Overview of TRC 12-064 – Rose Valley Colony				
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6	Identified suitable water source (Tributary of the LaSalle River) and a water consumption rate of 58,045 imperial gallons per day	х	All operations using more than 25,000 litres (5,499 imp gal) per day must maintain a Water Rights Licence under <i>The Water Rights Act,</i> Water Rights Regulation (<i>M.R. 126/87</i>). 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 valid Water Rights Licence and has been issued a Development Authorization Permit for the proposed expansion. They are currently in good standing with the Water Use Licensing Section.	сс
7	Proposed project site meets development plan, zoning by- law	Х	 Designation The proposed livestock operation, located in the NE ¼ 22-6-6W in the RM of Dufferin, is designated Restricted Agricultural Policy Area (Carman-Dufferin Planning District By-law No. 03/2014) and the proposal complies with Development Policies 3.1.13-3.1.22 (Livestock Policies). <u>Note</u>: Development Plan Amendment By-law No. 10/2018 was approved on February 13, 2019 to allow existing operations to expand beyond 300 AU within the Restricted Agricultural Policy Area as a Conditional Use. Zoning The proposed site is zoned "AR" Agricultural Restricted (Carman-Dufferin Zoning By-law No.04/2014) and has a minimum site area requirement of 80 acres with a minimum site width requirement of 660 feet. <u>Note</u>: Zoning By-law No. 12/2019 was approved on May 15, 2019 to allow existing operations with more than 300 AU to expand as a Conditional Use in the "AR" Zone. Section 42(2) of <i>The Planning Act</i> requires that development plans must include a livestock operation policy that guides zoning by-laws dealing with livestock operations. 	

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	Provincial Technical Overview of TRC 12-064 – Rose Valley Colony					
ltem No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dept.		
8	Identified any unsealed abandoned wells on the project site or spread fields	X	The Draft Report identifies that the water use for the proposed livestock operation is from a surface water source (tributary of La Salle River). The provincial water well database does not contain information for wells located on the proposed property; however, the database indicates that there are wells present within the spread field locations. Therefore during manure spreading the setback distances to all groundwater features as prescribed under The Environment Act's Livestock Manure and Mortalities Management Regulation should be considered as a minimum distance. As per <i>The Groundwater and Water Well Act</i> ; Well Standards Regulation 215/2015: 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 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: https://www.gov.mb.ca/sd/water/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	ARD		
9	Identified suitable manure storage methods	X	be accessed from the above web page. 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 must be submitted to Environmental Approval Branch of Conservation and Climate (<u>EABDirector@gov.mb.ca</u>). 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 as per the Livestock Manure and Mortalities Management Regulation (MR 42/98).	сс		
11	Mortalities disposal methods identified (composting)	Х	The proponent has indicated that mortalities will be dealt with by composting. Composting mortalities must be completed in accordance with section 15.1 of the Livestock Manure and Mortalities Management Regulation (MR 42/98)	сс		

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	Provincial Technical Overview of TRC 12-064 – Rose Valley Colony				
ltem No.		Confirmed	Related Provincial Safeguards	Dept.	
12	Proposed suitable setback distances from water and property lines for manure, livestock and mortalities	Х	The Livestock Manure and Mortalities Management Regulation requires a mortality composting site to be at least 100 m from any surface watercourse, sinkhole, spring or well (Section 15.1(1) (a) of the Livestock Manure and Mortalities Management Regulation). Proposed Setback Distances from Water and Property Lines the proponent indicates that the Mortalities Composting site will be 56 m from an Order 1 drain; however, the existing compositing sites are to be moved to a new location to meet the required minimum setback distances from the watercourse (order 1 drain to the west). The compost sites at this location have moved around in the cultivated field from year to year. Under 15.1(1) of the regulation; these facilities must be acceptable to the Director of Environmental Approvals Branch whether moved annually or permanently situated. For any compost site, groundwater must be protected from pollution. For a permanently situated site this protection could be achieve by constructing a site with a liner (usually clay). Alternatively, the compost site could be moved annually from place to place in a cultivated field to facilitate nutrient removal by vegetation.	сс	
13	Indicated if proposed project site is within designated flood area or is otherwise at risk of flooding	Х	This site is not within a Designated Flood Area. Parts of this site were flooded in 1974 and 1979. The 1974 flood event was roughly a 1:42 year flood event. The 1979 flood event was roughly a 1:50 year flood event. Manitoba uses a 1:200 year event to determine flood risk. The 1:200 year event on the Boyne river at this location is unknown. The Applicant should avoid building in areas of low elevation. Please see the flood imagery from 1974 (See Appendix A). Any project found in a designated flood area will be subject to Section 17 of the Water Resources Administration Act and the Designated Flood Area Regulation.	мі	
14	Proposed acceptable odour control measures	х	The proponent has indicated that existing shelterbelts will be used. 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.		
			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	

Provincial Technical Overview of TRC 12-064 – Rose Valley Colony				
ltem No.	Provincial Requirements	Confirmed	Related Provincial Safeguards	Dep
15	Proposed sufficient and suitable land for manure spreading with minimum setbacks from water sources	x	Rose Valley Colony is required to demonstrate that they have access to at least 2,986 acres of suitable land for manure application. They have demonstrated that they have access to 3,403 suitable acres with legible soil tests for manure application with an additional 633 acres without legible soil tests. (See Appendix B).	ARI
16	Indicated if spread fields are located in the Red River Valley Special X Management Area or any other regularly inundated area		As per Section 14.2(1) of the Livestock Manure and Mortalities Management Regulation, the proposed spread fields are not located within the Red River Valley Special Management Area and are not subject to frequent flooding or inundation.	сс
17 Proposed spread fields, that meet development plan and zoning by-law requirements		Х	The proposed spread fields comply with Development Policies 3.1.13-3.1.22 (Livestock Policies) and the Carman-Dufferin Zoning By-law No.04/2014.	MR
	Proposed acceptable manure transportation methods	cceptable nanure ansportation	The transport of livestock manure is subject to Section 9 of the Livestock Manure and Mortalities Management Regulation. The proponent has indicated dragline as means of transportation. This is considered acceptable under the Livestock Manure and Mortalities Management Regulation.	сс
18		Х	Note: Any structures placed within the controlled area of PR 245 & PR 338 (125 feet from the edge of the right-of-way) requires a permit from our office. The contact is Sheena del Rosario at (204) 945-3457. The placement of temporary draglines or any other temporary machinery/equipment for manure application within the right-of-way of PR 245 & PR 338 requires permission from our regional office in Portage. Please contact the Regional Planning Technologist (Denise Stairs) at (204) 871-2239. 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 245 & PR 338 (125 feet from the edge of the right-of-way).	мі
19	Identified suitable trucking routes and access points	х	The proposed truck haul routes utilizes a municipal road with an existing access connection onto PR 245. We do not anticipate a significant increase in use of that access. We note that according to the spread fields maps, there is no crossing a provincial highway.	мі

	Provincial Technical Overview of TRC 12-064 – Rose Valley Colony					
ltem No.	Contirmed Related Provincial Sateguards		Dept.			
20	Identified proposed trucking routes – local roads	x	A Truck Route has been provided. Rose Valley Colony is located 2.4 km southwest of Graysville and is south or PR 245. The colony is approximately 9.7 km east of Roseisle. The proposed site is 4.8 km east of PR 338. The proposed site is accessed by a municipal road.	MR		
			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.			
21	Confirmed that no rare species are impacted on new sites/lands	х	The Conservation Data Centre Report indicates that no species listed under the provincial Endangered Species and Ecosystems Act, the federal Species at Risk Act, or classed as at-risk according to internationally recognized standards, have been documented in the project area.	ARD		

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

D. PUBLIC COMMENTS AND DISPOSITIONS

Public Comment	Summary
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Darren Bergen LCL Construction Ltd. Carman, MB. R0G 0J0	OPPOSED There is already excessive smell whenever there is a northwest wind. The commenter can already smell a strong odour from the pigs when in his yard. The commenter is concerned an expansion of this size will increase the already strong odour. The commenter lives a few miles away.
Joe Sahilling Carman, MB. R0G 0J0	CONCERNED Not opposed if the operators will get better control over the smell. Commenter is located north of the operation and the smell is unbearable when there is a south wind. Concerned it may reduce the value of his property.
John and Shawn Jones Graysville, MB. R0G 0T0	 CONCERNED Have three concerned they believe need to be addressed before the proposed expansion should be approved: There are no proposed Odour Control Measures set out in the site assessment. Given the proximity of the expansion and existing operation to several residential sites and the Village of Graysville, commenters propose that the manure storage requirements for the expanded operation should be satisfied by covered concrete or steel tanks. Concerned with the effectiveness of the current and proposed mortalities disposal set out in the site assessment given the size of the proposed expansion. The remains of pig mortalities have made their way onto the commenter's property (they expect having been carried there by various animals). The commenters believe conditions should be adjusted to prevent this from happening. Concerned about increased heavy truck traffic and associated dust and noise. The existing road past the commenter's residence has difficulty handling the existing traffic. Safety is also a concern.
Ethel Hook Winnipeg, MB. R3J 3N9	CONCERNED Writer has a number of questions related to the placement of uncovered earthen manure storage facility, and manure management. She would like the questions outlined in her letter (see full letter posted under Public Comments on the TRC Public Registry).
Beverly Stow	CONCERNED Concerned about size of proposed expansion and the impact it will have on the smell to her property. Smell associated with the operation is not currently an issue for the commenter but she is concerned about if the operation is to increase in size. Also concerned about potential pollution and road safety issues.

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

See Appendix C 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

- 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 Morden 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.*
- 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
 - c) the applicant,
 - d) the Minister (c/o the Morden Community Planning Office), and
 - e) every person who made representation at the hearing.
- According to the Carman-Dufferin Zoning By-law (04/2014), the required minimum separation distance between the operation's earthen manure storage (EMS) and a residence is 4,594 ft. versus the actual distance of 3,650 ft. The required minimum separation distance between the operation's EMS and designated area (Graysville) is 9,186 ft. versus the actual distance of 7,920 ft. As a result, Council will require the proponent to apply for a variance for each situation.
- 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 variance orders.
- 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.

- 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.

- 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.

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

- That variances be applied for prior to the Conditional Use Hearing to vary the separation distance between the earthen manure storage structure to the nearest dwelling and designated area (Graysville). This will enable Council the option of holding a combined Conditional Use and Variance Hearing.
- That the proponent request the municipality hold a combined hearing.
- 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.

Note:

- 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, or
 - (ii) a decision to impose any condition on the approval.

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title Branch	Contact
Don Malinowski	Municipal Relations	Senior Planner Community Planning Branch	204-945-8353
Petra Loro	Agriculture and Resource Development	Livestock Environment Specialist Agri-Resource Branch	204-918-0325
Shannon Beattie	Conservation and Climate	Policy Analyst Legislation, Policy and Coordination Branch	204-792-6269
Jeff DiNella	Infrastructure	Senior Development Review Technologist Highway Planning and Design Branch	204-945-2664

Appendix A Manitoba Infrastructure

1974 Flood Imagery



Appendix B Agriculture and Resource Development

Water Science and Watershed Management Branch:

Staff in the Water Science and Watershed Management Branch have reviewed the site assessment for the Rose Valley Colony proposal in the RM of Dufferin and have the following comments:

- Nutrient management that avoids excess loss of nutrients to surface waters is 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 either inject or broadcast manure. Injection of manure at appropriate rates poses lower environmental risk than other manure application methods. When manure is broadcast, immediate incorporation reduces losses of nitrogen via ammonia-volatilization and reduces the risk of N and P losses in runoff to surface waters.
- 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. Application of liquid manure with injection will reduce N losses compared to broadcast methods and is encouraged whenever possible.
- 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 5,453 acres may be required for the long-term environmental sustainability of the operation. The proponent has identified 3,561 acres for manure application. Application to meet crop N requirements is estimated to use 2,986 acres. 5,453 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 (Bi Carb) soil test levels so as to prevent excessive P buildup when applying manure at rates above P balance (P removal by harvested crops).

Agri-Resources Branch:

Rose Valley Colony has met the land requirements for 1400 sows (farrow to finish), 20,000 layers, 10,000 pullets and 5 mature dairy cows, as follows:

In areas of lower livestock intensity such as the RM of Dufferin, 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 Rose Valley Colony manure management plan to balance phosphorus with crop removal, should it be necessary in the future.

In order to determine the land requirements for Rose Valley Colony, nitrogen and phosphorus excretion by all of the livestock are 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 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Dufferin.

Land suitability is determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the lands with soil tests were below 60 ppm Olsen P, as required to be considered suitable. Detailed soil survey is available to determine the agriculture capability of the land. The agriculture capability of the land included in the proposal is predominantly Class 1 and 3 (prime agricultural land) with some areas of Class 5 land. The limitations are predominantly droughtiness (M) and wetness (W).

Rose Valley Colony is required to demonstrate that they have access to at least 2986 acres of suitable land for manure application. They have demonstrated that they have access to 3403 suitable acres with legible soil tests for manure application with an additional 633 acres without legible soil tests.

Appendix C Proponent Response to Public Comments



8-851 Lagimodiere Blvd. Winnipeg, MB R2J 3K4

Phone: 204.668.9652 Fax: 204.668.9204 E-mail: sme@southmaneng.com

March 31, 2020

Community Planning Manitoba Municipal Relations 600-800 Portage Av Winnipeg, MB R3G 0N4

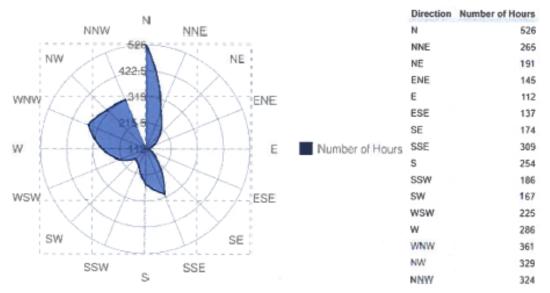
Re: Rose Valley Colony Site Assessment Response to Public Comments and Concerns

Comment #1: Darren Bergen (residence location: NW 12-6-6W)

Although this residence is outside the 3 km radius (about 3.3 km from the proposed EMS location), it is conceivable that this resident would experience odour when the wind is blowing from the northwest. During normal daily operation the odour intensity would not be expected to be enough to cause any great disruption. During periods when the manure storage is being cleaned out and field applied, the odour intensity is expected to intensify and at that time may become more of a nuisance. The proposed modifications will provide sufficient manure storage to accommodate for once per year manure application, thereby reducing the frequency of such incidences. Through management practices the colony can also mitigate these impacts by field applying manure on parcels of land not in direct line with specific neighbours depending on the prevailing wind directions predicted during that period. Similarly field storage of soild manure can be situated with these same considerations taken into account.

Comment #2: Joe Schilling (residence: north of the project site)

Mr. Schilling has expressed that he is not opposed to the expansion however has concerns with regards to odour particularly when there is a south wind. The prevailing winds directly from the south are relatively infrequent, however some impact is liekly. As indicated in Comment #1 it is intended to provide sufficient manure storage to facilitate only once per year manure application thus eliminating the need for multiple intense odour activities such as field application and manure storage agitation. Upon completion of the development it is also intended to establish shelter belts around the manure storages as the colony residences experience a similar odour of greater intensity than you would due to their proximity when the wind direction is in line. The addition of shelter belts on the south and east sides of the manure storage will aid in reducing wind from carrying odours a significant distance by reducing the wind speed over the surface.



Wind direction distribution at Carman station

https://carman.weatherstats.ca/charts/wind_direction-guarterly.html

Comment #3: John and Shawn Jones (residence: may be SE 28-6-6W)

The location of the residence of John and Shawn is not mentioned in the letter though their comments suggest that the residence is likely on SE 28-6-6W.

Concern #1: Given the proximity of this expansion and the existing operation to several residential sites (including our own) and the Village of Graysville, we propose that the manure storage requirements for the expanded operation should be satisfied by a covered concrete or steel tank. We believe that this proposed condition is reasonable given the size of the proposed expansion and its location at least partially within the Restricted Agricultural Policy area.

Response: The siting and mutual separation distances of the proposed expansion from the features are based on the amended zoning bylaw (Bylaw # 12/2019) of Carman-Dufferin Planning District. The proposed site satisfies the required separation distance from the residential site mentioned in the comment. However, application for a variance order has already been submitted to the RM for the separation distance from the Village of Graysville. Since the prevailing wind from the south and SSE are relatively infrequent, we expect that impacts of odor from the proposed expansion on these residential sites and the Village of Graysville will not change significantly from what has existed in the past.

Concern #2: We are concerned with the effectiveness of the current and proposed Mortalities (Dead Animal) Disposal set out at paragraph 10.3, particularly given the size of the proposed expansion. Remains of mortalities (pigs) have made their way regularly onto our property. We believe it would be appropriate to have conditions which would address the integrity of the mortality disposal sites to prevent this from happening.

Response: Siting of the proposed mortalities compost site meets the requirements of the RM's zoning bylaw. The design and management of the composting facility shall prevent the entry of predators and domestic animals into the facility and eliminate the removal of carcasses as you have suggested Similarly, theses carcasses are to be adequately covered with compost medium to discourage burrowing and unearthing of the carcasses from the compost bed. Additional management practices and the incorporation of an appropriate fence will be provided to avoid any further events such as this from occurring.

Concern #3: We are also concerned about the increased heavy truck traffic, along with the associated dust and noise that would be the inevitable result of the proposed expansion. Safety is also a concern given the blind corners near the highway.

Response: With exception of during the construction phase it is not anticipated that vehicle traffic will increase significantly with the proposed expansion. During construction periods it would be suggested that dust control be placed on the portion of the municipal road that is in close proximity to your residence and the blind corners that are also in close proximity. A cost sharing agreement between yourselves, Rose Valley Colony and Kroeker Farms would be a reasonable solution as all parties are directly impacted.

With regards to safety, it is reasonable that the municipality can install speed restriction and warning signs associated to the blind curves that are present. Members of the colony would be familiar with the safety concerns, however, others from outside of the colony may not possess this same knowledge and it would be advisable to alert them to the dangers.

Comment #4: Ethel Hook (residence: may be east of the site on SE 23-6-6W)

The Site Assessment proposal states that the existing 'earthen manure storage' (EMS) facility is closer to the east property line than is permitted: Despite this, the proposal states that the expanded EMS facility will be located adjacent to the existing site, and an application will be made for a Variance to the zoning bylaw: It further states that the future expanded EMS facility will not have a 'manure storage cover'.

Concern #1: What is the basis for regulations regarding minimal distances for manure storage facilities from residences/dwellings and non-agriculture designated areas? [*Site Application document: #8.3 Separation Distances (zoning bylaw); and #10.4 (Proposed Setback Distances from Water and Property Lines)]*

Response: Both the separation distances (Site Assessment # 8.3) and setback distances (Site Assessment # 10.4) are based on the zoning bylaw (Bylaw # 04/2014) of Carman-Dufferin Planning District and requirements of MB Sustainable Development. These distances have been determined from research conducted by the Manitoba government and other jurisdictions that have significant livestock development. The intent was to establish and determine distances that would minimize the potential for nuissance complaints as well as provide a reasonable level of environmental protection.

Concern #2: Why is the proposed expanded manure storage facility to be located in an area that does not currently meet said minimal requirements? Why would this be allowed? **Response:** The proposed location was selected to further remove the earthen manure storage from the surface water located west of the storage site in order to minimize the risk of pollution of surface water resources. The setback distance of the manure storage from the east property line meets the minimum setback distance required by the RM and MB Sustainable Development (100 m). As a consequence of meeting the required setback distances for environmental protection it is required to apply for a variance from the RM to vary the separation distance of the manure storage from the residence east of the site.

Concern #3: What are the risks of sewage leakage/contamination to the land and the nearby Boyne River because of this non-adherence to minimal requirements? How will a Variance order mitigate the risks?

Response: The minimum setback distance from the nearest surface water course as required by the zoning bylaw and MB Sustainable Development was adhered to while selecting the proposed site for the manure storage. The separation distance coupled with ongoing monitoring of the manure storage performance is intended to protect surface water resources in the area. **Concern #4:** Given that the Boyne River runs through my property, what could be the potential negative impact on my property from greatly increased manure storage needs, and what guarantee is there that such damage will not occur? **Response:** Response to concern #3 above is similar in nature.

The Site Assessment proposal also states that the ".... first and immediate phase is to be construction of a new barn to accommodate 1200 grower/finisher pigs which are currently housed off-site in a rented barn" [17.0 (Additional Information)]. Despite this influx of animals, there is no reference to any expansion of manure management at this stage.

Response: Sufficient land base has been identified in the rural municipalities of Dufferin and Thompson for utilization of the manure nutrients to ensure long-term environmental sustainability. Moreover, filing of an annual manure management plan based on *Livestock Manure and Mortalities Management Regulation* will ensure monitoring of the sustainability.

Concern #5: What will be the impact of the 1200 additional animals on the capacity and capability of the existing concrete manure tank and manure storage facility?

Response: The existing concrete tank is capable of storing manure production from 1100 sows: f-f, 10,000 pullets and 5 dairy cows for 254 days thereby eliminating the need for winter application of manure as required by MB Sustainable Development. The proposed earthen manure storage will not be constructed until the next phase when the hog inventory is further increase. There is a desire to by the proponent to reduce the frequency of manure application to once per year which may also precipitate the construction of the earthen storage in advance of any further animal number increases.

Comment #5: Beverly Stow

Based on the information provided it appears that Ms. Stow is situated approximately 5 miles to the southeast of the proposed site. Although it does not appear that all of the concerns of Ms. Stow were received due to scanning or faxing issues during transmission it was possible to ascertain many of the environmental issues of concern. Issues such as water supply, surface water runoff, nutrient runoff, accumulation of nutrients in the soil and social issues were the most prominent.

With exception of the social issues to which we cannot comment the remaining concerns are legitimate and of importance in all respects of agricultural production. The concerns expressed have been the focus of regulatory policy development for many years to ensure that these concerns are addressed and monitored on an on-going basis for operations such as that proposed by Rose Valley Colony. Any operation in excess of 300 AU are legislated to file annual manure management plans which outline the manure nutrients to be applied and at what rates to specific fields. Soil tests for these same fields serve to provide a history for the nutrient applications in the past to ensure nutrient accumulations are not occurring and resulting in an increased potential for nutrients impacting surface and groundwater resources.

Water licencing requirements are intended to monitor and establish the viability of water resources within a known aquifer to ensure sufficient supply for all users. Licencing becomes mandatory where daily usage exceeds 25,000 L as in the case of Rose Valley Colony. With the increased usage anticipated with the increase in animal inventory, the colony will be required to file for an amended water rights licence and undergo the review and approval process.

As indicated in the response for John and Shawn Jones in regards to safety, it is reasonable that the municipality can install speed restriction and warning signs associated with the blind curves that are present just south of Hwy 245 on Rd 33W.

To keep things in perspective we must bring to your attention that Rose Valley Colony consists of 18 families that are supported by agricultural activities. Based on the proposed 1860 AU, this would represent 103 AU per family, the equivalent to a 50 cow dairy herd, 82 sows F-F or 82 cow-calf pairs. As a result of choosing to live as a community the livestock associated with each family is considered as one entity and therefore endures much more scrutiny and regulation than would otherwise be imparted as a individual. From this perspective alone, the impacts of this one operation are anticipated to be much lesser than 18 individual smaller operations.

Respectfully Submitted,

South-Man Engineering

Per, ILA .

Peter Grieger, P. Eng.