



**TECHNICAL REVIEW COMMITTEE**

**A TECHNICAL REVIEW REPORT  
PREPARED FOR**

**THE RURAL MUNICIPALITY  
OF CARTIER**

**Waldheim Colony  
NE 20-10-3 WPM**

**TRC 12 – 027**

**June 12, 2017**  
(Refined June 13, 2017)

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## 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-12-027  
Waldheim Colony



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## B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to

[www.gov.mb.ca/ia/programs/livestock/public\\_registries.html](http://www.gov.mb.ca/ia/programs/livestock/public_registries.html)

**Applicant:** Waldheim Colony

**Site Location:** Approximately 4 miles south west of the community of Elie; 3 ½ miles west of PR 248 (at NE 20-10-3W WPM). Refer to map below.

**Proposal:** To expand chicken production from the current 9,000 layers (75 Animal Units / AU) and 6,400 pullets (22 AU) to 20,000 layers (166 AU) and 20,000 pullets (66 AU) respectively, within an Animal Confinement Facility.

This will involve the following:

- Construction of a new poultry barn
- Existing dairy operation to be discontinued
- Existing dairy and poultry buildings to be used for other miscellaneous and non-livestock purposes
- Consuming 31,048 imperial gallons of water per day from existing onsite well
- Use of existing earthen manure storage facility with 590 -day storage capacity
- Rendering mortalities and permanent onsite composting of mortalities
- Using the truck haul routes as shown below



TRUCK HAUL ROUTE

## C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of: Waldheim Colony			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
1. Submitted complete Site Assessment	X	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.	IMR
2. Clearly defined the project as a <u>X</u> Animal Confinement Facility	X	A new poultry barn is to be constructed.  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 and the Manitoba Building Code</i> .	IMR
3. Proposed Project Site Flood Risk Potential	X	Water Management, Planning and Standards is not aware of any major overland flooding risk at this location	MI
4. Identified 31048 imp gal required for proposed operation	X	The proponent has indicated a maximum daily water use of 31,048 imperial gallons.  Based on our understanding of the proposed facility, this project will require a Water Rights Use License 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
5. 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 proposal indicates that the operation will use the existing manure storage facility, therefore, no permit for construction, or expansion of the manure storage facility is anticipated. If a new pipeline is installed to connect the barn to the existing manure storage facility a permit would be required for modification.	SD

**Provincial Technical Overview of: Waldheim Colony**

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
		<p>Environmental Compliance and Enforcement Branch intends to inspect this site in the near future.</p> <p>The proponent has indicated that the chicken manure will be combined with hog manure in the earthen manure storage facility.</p> <p>According to a letter report submitted by South-Man Engineering dated July 11, 2010, a comprehensive evaluation of the existing earthen manure storage facility was to be undertaken. Manitoba Sustainable Development does not have further correspondence or reporting on file. In a phone discussion on May 19, 2017, Waldheim Colony indicated that their engineering consultant is being retained to complete this evaluation.</p>	
6. Proposed Project Site with suitable mortalities disposal methods (rendering)	X	Composting and Rendering are proposed for mortality disposal. Both are approved methods under the Livestock Manure and Mortalities Management Regulation. The proponent has indicated that the spent hens will be butchered for use (i.e. they will not be composted).	SD
7. Proposed Project Site with acceptable odour control measures	X	<p>Waldheim Colony has indicated that they will use existing shelterbelts for odour control.</p> <p>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.</p> <p align="center">—————</p> <p>The Planning Act allows Municipal Councils to require a manure storage cover and the planting of a shelter belt as a condition of approval.</p>	<p>Ag</p> <hr/> <p>IMR</p>
8. Proposed Project Site that meets development plan and zoning by-law requirements	X	The site is appropriately designated as Rural General Policy Area in the White Horse Plains Planning District Development Plan By-Law No. 1-2016 and zoned "AG" Agricultural General zone in the RM of Cartier Zoning By-Law No. 1620-11. Livestock Operations larger than 200 A.U. but less than 300 A.U. are a permitted use in the "AG" Agricultural General zone in the RM of Cartier Zoning By-Law No. 1620-11. Mutual Separation Distance for 201 to 299 A.U. from a	IMR



**Provincial Technical Overview of: Waldheim Colony**

<b>Items Provided by Project Proponent</b>	<b>Con- firmed</b>	<b>Related Existing Provincial Safeguards</b>	<b>Dept</b>
		Dwelling Unit to an earthen manure storage shall be 460 metres (1,509 feet).	
9. 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
10. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	<p>In order to determine the land requirement for Waldheim Colony, nitrogen utilization and phosphorus excretion by all of the livestock is compared to phosphorus removal by the crops to be grown. 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.</p> <p>In the RM of Cartier, new and expanding livestock operations (except pigs) are required to demonstrate access to sufficient suitable land for all of the nitrogen and half of the phosphorus excreted by the animals, whichever is greater. As such, Waldheim Colony is required to demonstrate that they have access to at least 1539 acres for manure application.</p> <p>Waldheim Colony has demonstrated that they have access to 2383 suitable acres for manure application. This exceeds the current land requirement. Waldheim Colony has also demonstrated that they have an additional 3210 acres for manure application that have yet to be soil tested.</p> <p>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 reconnaissance soil survey, the agriculture capability of the suitable land included in the proposal varies from Class 1 to 3, all of which is considered prime agricultural land. The limitations include wetness (W) and salinity (N).</p>	Ag
11. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from	X	The proponent has acknowledged the setback areas for all water features have been observed and excluded from landbase 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: Waldheim Colony**

<b>Items Provided by Project Proponent</b>	<b>Con- firmed</b>	<b>Related Existing Provincial Safeguards</b>	<b>Dept</b>
natural features (water sources etc.)			
12. Proposed Spreadfields that have been secured by spread agreements	X	Waldheim Colony has met the land requirement with lands that are under the Colony's ownership. They have also included additional lands for manure application that are under lease agreements.	Ag
13. Proposed Spreadfields that meet development plan and zoning by-law requirements	X	All spreadfields are designated Rural General Policy Area in the White Horse Plains Planning District Development Plan By-Law No. 1-2016 and zoned "AG" Agricultural General zone in the RM of Cartier Zoning By-Law No. 1620-11 and are considered compliant. Part IV, Section 16.9.5 Manure Management Plans Proponents, owners or operators of approved new or expanding Livestock Operations involving the production of <b>300 A.U. or more</b> shall submit a copy of the manure management plan to the RM of Cartier Council upon request.	IMR
14. Proposed trucking routes and access points that do not impact Provincial Roads or Provincial Trunk Highways	X	We have no concerns with this proposal. Please note that any structure placed within the controlled area of PR 248 (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 drag lines for manure application within the PR 248 Right-of-Way requires permission from our regional office in Portage la Prairie. 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 drag lines for manure application within the controlled area of PR 248 (125 feet from the edge of the Right of Way).	MI
15. Proposed trucking routes – local roads	X	PR 248 is the proposed trucking route and Waldheim Road is the local road. Under The Planning Act, Municipalities as a condition of approval may require Waldheim Colony to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes.	IMR
16. Declared Provincial Waterways	X	Section 14 of the Water Resources Administration Act, C.C.S.M. c. W70 defines a Provincial Waterways as the following: "provincial waterway" means a water control work, natural water channel, or lake that has been declared to be a provincial waterway under section 13; (« cours d'eau provincial »)  Several of the manure spreading sites are adjacent to Provincial Waterways. If a Provincial Waterway is to be crossed by temporary manure hose, a Provincial Waterways Authorization must first be	MI

Provincial Technical Overview of: Waldheim Colony			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
		obtained from Manitoba Infrastructure, Water Management, Planning and Standards branch.”  The contact is <a href="mailto:MITWaterReview@gov.mb.ca">MITWaterReview@gov.mb.ca</a>	

Provincial Departments

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

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## D. PUBLIC COMMENTS & DISPOSITIONS

Public Comment Summary	Proponent Response/Disposition	Provincial Comment (if any)
Florent Legault Debbie Troche	One of my concerns is how big can these corporate farms get. Is it the idea of the Manitoba government to have one large corporate farm so they have less to deal with?  _____	_____

	<p>Second concern is the whole of the farm with the numbers of all that they have going on this farm (Poultry Units, Pigs units. Cattle units, Bees units, shop manufacturing, grain and others operations possibly that I am not aware of. You do not state in your letter how many chickens equal one unit.</p> <hr/> <p>Third concern. Environment. What is the environmental impact If they want to be a large corporate company? What is the government doing to control or be aware of the impact that these and other large corporate farms are having on the environment?</p> <hr/> <p>Fourthly, where does the small farmer such as myself fit in? I grew up in this area and still live on the family homestead and in my lifetime I have seen the road I live on have many farms that supported many families to now have three farmers who have bought all the land and have become large or corporate farms. It is becoming more and more difficult for the small farmer like myself to support himself solely on what he can produce. Our limits are 100 hens and can only sell eggs from the gate. And mean while other farmers are asking for more and more and it is likely that they will be approved.</p>	<p>120 Layers = 1 AU 300 Pullets = 1 AU</p> <hr/> <p>The Province assesses the environmental impact of each livestock proposal. Existing operations are subject to Provincial Regulations. Please refer to Section C of the report Re: Provincial Safeguards of livestock.</p> <hr/>
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**FOR THE PROPONENT'S RESPONSE TO THE PUBLIC COMMENTS – PLEASE REFER TO APPENDIX B**

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## 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.

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## 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

## **Appendices**

In depth analysis and individual reports from each department commenter

# Appendix A

## LIVESTOCK TECHNICAL REVIEW COMMITTEE

### SUMMARY OF COMMENTS / RECOMMENDATIONS

**PROPONENT:** Waldheim Colony  
**PROPOSAL NAME:** Waldheim Colony  
**TYPE OF OPERATION:** 1002 Mixed  
**RURAL MUNICIPALITY:** Cartier  
**OPERATION LOCATION:** NE 20-10-3 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 proposal indicates that the operation will use the existing manure storage facility, therefore, no permit for construction, or expansion of the manure storage facility is anticipated. If a new pipeline is installed to connect the barn to the existing manure storage facility a permit would be required for modification.

The proposal indicates that the operation will use the existing manure storage facility, therefore, no permit for construction, modification or expansion of the manure storage facility is anticipated.

Composting and Rendering are proposed for mortality disposal. Both are approved methods under the Livestock Manure and Mortalities Management Regulation.

The proponent has indicated a maximum daily water use of 31,048 imperial gallons.

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

Environmental Compliance and Enforcement Branch has reviewed the above noted proposal and has the following comments:

- Environmental Compliance and Enforcement Branch intends to inspect this site in the near future.
- Pg 16 indicates that the proposal includes a permanent site for composting mortalities. Will this site be used for spent hens? If the composting process utilizes a substantial amount of manure (>15% by weight), a permit to construct a manure treatment facility will be required.
- Will the chicken manure be combined with hog manure in the earthen manure storage facility or will it be field stored separately? "
- According to a letter report submitted by South-Man Engineering dated July 11, 2010, a comprehensive evaluation of the existing earthen manure storage facility was to be undertaken. Manitoba Sustainable Development does not have further correspondence or reporting on file. In a phone discussion on May 19, 2017, Waldheim Colony indicated that their engineering consultant is being retained to complete this evaluation.

*[Note: the proponent later responded that spent hens will not be composed on site colony is butchering for on use rest will be sold live weight and that the chicken manure would be stored along with hog manure in the same manure storage facility].*



**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 Waldheim 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 landbase 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 or broadcast manure followed by incorporation within 48 hours. 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 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 removal rates. Therefore, the proponent has acknowledged that up to 3077 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/waterinfo/mise/abandoned\\_wells.pdf](http://www.gov.mb.ca/conservation/waterstewardship/waterinfo/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 well drilling professionals is located [http://www.gov.mb.ca/conservation/waterstewardship/waterquality/wellsgroundwater/well\\_drillers.html](http://www.gov.mb.ca/conservation/waterstewardship/waterquality/wellsgroundwater/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 License 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."

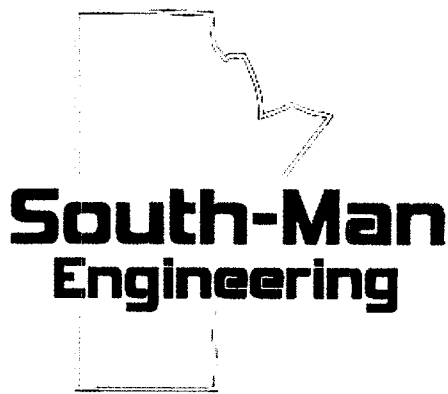
**Biodiversity & Land Use Division; Lands Branch; Provincial & Regional Land Management Planning section**

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:**

Jen Webb, Manager  
Environmental Approvals Branch  
Environmental Stewardship Division  
Manitoba Sustainable Development

## **Appendix B**



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Don Malinowski  
Senior Planner  
Community & Regional Planning Branch  
Technical Review Section  
604-800 Portage Ave.  
Winnipeg MB  
R3G 0N4

June 12, 2017

**Re: Waldheim Colony  
Technical Review - Response to Questions and Public Concerns**

Dear Mr. Malinowski;

In response to questions and concerns expressed by the public and members of the Technical Review Committee we have prepared this letter in consultation with the proponent in order to address the concerns expressed.

**Item #1 – Comments of Manitoba Environmental Compliance and Enforcement Branch**

The proposed composting site is only intended for mortalities which occur during the production process. Spent hens will typically be butchered for consumption by the colony membership and therefore not require disposal by means such as composting or rendering. It is not intended to utilize any significant amount of manure in the composting process as manure produced by the proposed operation will be handled as a liquid. Straw, wood shavings and organic garden waste are the most likely medium to be used during the composting process and will therefore not require a permit to construct a manure treatment facility.

It is intended to handle the manure produced by the proposed facility as a liquid and introduce this into the existing earthen manure storage. Sufficient capacity exists to accommodate 400 days of storage for the existing hog operation and proposed layer facility. As there will be an additional influent line required to facilitate the new barn, a permit application will be required to be filed with Sustainable Development. This permit application will incorporate details of the influent line and erosion protection that will intend to be installed.

Subsequent evaluation and monitoring of the earthen manure storage currently utilized to store the manure from the existing hog operation was conducted between 2010 and 2012. Monitoring well results

from 2012 and just most recently 2017 have revealed very little variation in the constituents tested for. This information along with the clay sampling has indicated that the clay soils from which the storage was constructed are suitable to provide the necessary environmental protection. However, the presence of topsoil in several locations beneath the berms has indicated the need for some remedial work in order to isolate these materials. Additional erosion protection at the influent line was also determined to be required to ensure slope stability. As it will be intended to apply for a permit from Sustainable Development to install the lift station, influent line and erosion protection for the proposed layer operation and interconnect with the existing EMS, it is intended to address the other remedial work at the same time and undertake the work under the same permit in order to ensure compliance with current storage requirements.

**Item #2 – Florent Legault and Debbie Troche**

Waldheim Colony will consist of 20 to 25 families at its peak and as such must support these same families with the agricultural and manufacturing enterprises that they participate in. In the absence of any significant commercial enterprise, the colony is dependant primarily on its agricultural activities to provide the necessary income to sustain themselves and provide for the opportunity to start a new colony in the future as the population of the colony expands over time. As with any other family farm, where the children also wish to farm, it is inevitable that the operation must grow in order to be able to sustain the families operating it. Also take note of the fact that an existing 80 cow dairy herd (108 AU) was dispersed of and is proposed to be replaced by the layer and pullet operations which only represent 86 AU.

To put this into context, if Waldheim Colony was operated by the 20 individual families independent of one another, each family would operate approximately 300 acres of cropland, 1000 laying hens, 200 boilers and 30 sows farrow to finish. In today's economic environment, this size of operation would not be viable as a sole source of income.

As defined by the provincial regulation 120 laying hens is equivalent to 1 AU and similarly 303 pullets is equivalent to 1 AU. The calculation of animal units has been summarized in the table provided in the Site Assessment.

Due to the size and scope of the livestock operations currently in place and proposed by Waldheim Colony, they are required to comply with the Livestock Manure and Mortalities Management Regulation which is a provincial regulation that regulates the storage and application of livestock manure. A manure management plan must be submitted by the colony to the provincial government on an annual basis which includes soil test results on land to receive manure and the proposed application rates, in order to ensure that nutrient accumulations in the soil are not excessive and threatening to the environment. In the event that these same livestock operations were operated by 20 individual families, this same requirement would not exist as the animal units would be below 300 per family. Hence, in answer to your question, there are systems and regulations in place by the province to monitor the industry and protect the

environment established by the scale of the operations. These same requirements and monitoring would otherwise not exist if the proposed size of operations was operated by 20 individuals.

It is not possible to comment on the economic conditions that currently exist which are driving the agricultural sector. Each individual's situation is unique and each person has their own quality of life which they would like to maintain. Waldheim Colony has chosen to operate as a small community instead of individuals which has afforded them the opportunity to reap some of the reward of economies of scale which would otherwise not be possible and thereby maintain profitability.

I trust this response will adequately address the concern and questions expressed. Please feel free to contact me if you have any additional questions or concerns.

Respectfully Submitted

South-Man Engineering

Per

A handwritten signature in black ink, appearing to read 'P. Grieger', written over a horizontal line.

Peter Grieger, P. Eng