



TECHNICAL REVIEW COMMITTEE

**A TECHNICAL REVIEW REPORT
PREPARED FOR**

**THE RURAL MUNICIPALITY
OF
RHINELAND**

**BLUMENGART HUTTERIAN
MUTUAL CORP.
NE16-02-03W &
NW 15-02-03W**

TRC 12 - 015

JUNE 3, 2015

A. INTRODUCTION

The Technical Review Committee (TRC) consists of representatives from the following provincial departments:

- Agriculture, Food and Rural Development (MAFRD);
- Conservation & Water Stewardship (CWS);
- Infrastructure & Transportation (MIT);
- Municipal Government (MMG); and
- Any other department that may have an interest, which may be consulted during the process.

The Technical Review Coordinator, Manitoba Municipal Government, chairs the committee.

The Technical Review Committee Report includes the following:

- An assessment of completeness and nature of the information contained in the Site Assessment provided by the project proponent that enables the TRC to conduct its review.
- A summary of public comments along with proponent and departmental responses, if any.
- Recommendations to the Municipal Council and the proponent based upon a review of the information provided by the proponent.

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

B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description go to:

www.gov.mb.ca/ia/programs/livestock/public_registries.html

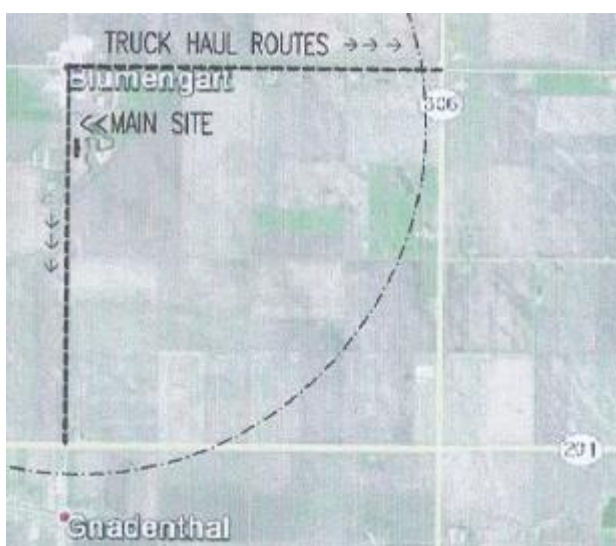
Applicant: Blumengart Hutterian Mutual Corp.

Site Location: Approximately 8 kms southwest of Plum Coulee

R.M. of Rhineland (NE16-02-03 WPM & NW 15-02-03 WPM) Refer to map below.

Proposal: To expand an existing mixed livestock operation (dairy, hog, chicken & turkey) to 1,889 Animal Units. The proposal is to account for the 2011 addition of 24,000 heavy hens (turkey) and a proposed expansion of the turkey operation of 18,000 broiler turkeys. This will involve the following:

- Replacing an existing starter barn with a new barn
- Continued field storage of manure
- Consuming 15,540 imperial gallons of water per day
- Poultry mortalities to be sent to Rothsay for rendering
- Using the truck haul routes as shown below



C.SITE ASSESSMENT AUDIT

The Audit of: Blumengart Hutterian Mutual Corp.

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
2.0 Description of Operation	X	The applicant has provided a detailed description of the current operation.	MMG
3.0 Nature of Project	X	The applicant has clearly defined the nature of the project.	MMG
4.0 Proposed Type and Size of Operation	X	Detailed comments are provided in the Appendix. In summary, MAFRD is satisfied that 1889 Animal Units represents all of the livestock associated with Blumengart Hutterian Mutual Corp including the expansion.	MAFRD
5.0 Animal Confinement Facilities	X	Climate Change & Environmental Protection – Environmental Approvals: Manitoba Conservation and Water Stewardship regulates the construction of manure storage facilities (MSF) by requiring the proponent to submit an "Application for Permit to Construct, Modify or Expand a Manure Storage Facility". The definition of MSF does not include gutter or pit (including under barn storage) used to contain liquid or semi-solid manure for less than 30 days for the purpose of moving the manure to a storage facility.	CWS
6.0 Environmental Farm Planning	X	Blumengart Hutterian Mutual Corp has indicated they have an up-to-date Environmental Farm Plan.	MAFRD
7.0 Water	X	Climate Change & Environmental Protection - Environmental Approvals: The operation is an existing facility with over 300 animal units; Source Water Monitoring for 2014 was submitted. Water Stewardship – Water Science and Management: 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). Reconnaissance soil survey maps indicate that SE¼ 22-2-3 WPM (field ID14), W½ 16-2-3 N WPM (field ID 18), SE¼ 16-2-3 WPM (field ID 19E), and SE ¼ 6-2-3 WPM (field ID 216) contain 4th order drains. The setback for 4th order drains is 15 metres assuming manure is broadcast without incorporation and the	CWS

The Audit of: Blumengart Hutterian Mutual Corp.

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		<p>adjacent buffer is permanently vegetated. In addition, maps indicate that S½ 18-5-2 WPM (field ID 140), W½ 16-2-3 N WPM (field ID 18), SE¼ 16-2-3 WPM (field ID 19E), and NW¼ 26-3-3w (field ID 111) contain a wetland feature. The setback for small wetlands is the distance between the water's edge and the high water mark. Also, the proponent must not apply nutrients directly to 1st and 2nd order drains;</p> <p>The application indicates that water for the operation will be from a pipeline. However there are wells reported from this area and therefore all unused and abandoned wells on the site and spread fields should be properly sealed and a sealed well report filed with the Groundwater Management Section of Conservation and Water Stewardship. Information on well sealing is available from Conservation and Water Stewardship (204-945-6959) or: www.gov.mb.ca/waterstewardship/water_info/misc/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 at: http://www.gov.mb.ca/conservation/waterstewardship/water_quality/wells_groundwater/well_drillers.html.</p> <p>During manure field storage and application all groundwater features, including water wells, should be given as a minimum, the amount of buffer as outlined in the regulations.</p> <p>Water Stewardship – Water Use Licensing: From the Water Use Licensing Section's interests, since the water source is a public pipeline which is already licenced, we have no concerns.</p>	
8.0 Manure Related	X	<p>Climate Change & Environmental Protection - Environmental Approvals: The proposal is for an existing operation currently greater than 300 animal units. The producer has submitted a Manure Management Plan for the 2015 crop year.</p> <p>In accordance with the Livestock Manure and Mortalities Management Regulation, field storage of manure is acceptable provided solid manure cannot escape the field storage area.</p> <p>Field storage sites must be changed annually and a crop grown on the storage site to take up any excess nutrients.</p> <p>Climate Change & Environmental Protection – Environmental Compliance and Enforcement: The Portage la Prairie Office of Environmental Compliance and Enforcement has reviewed the Site Assessment submitted on behalf of Blumengart Hutterian Mutual Corp, proposing the construction of a new turkey barn and expansion of the existing turkey production by 18000 bird places. The proposal indicates</p>	CWS

The Audit of: Blumengart Hutterian Mutual Corp.

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		the manure produced will be solid, and will be field stored. Our files do not indicate any outstanding enforcement issues that raise concerns regarding this proposal.	
8.1 Land Available/Required for Manure Application	X	<p>Climate Change & Environmental Protection - Environmental Approvals: Manitoba Conservation and Water Stewardship has obtained information on average phosphorus output from livestock and expected crop removal rates of phosphorus as well as Census data in order to estimate the phosphorus budget in each Rural Municipality within agro-Manitoba. "Certain Areas", are defined by the Livestock Manure and Mortalities Management Regulation as areas where the amount of phosphorus in the manure produced annually by livestock in an area of not less than 93.24 km² is greater than two times the annual crop removal rate of P₂O₅ in that area. The Rural Municipality of Rhineland is not considered to be a "certain area".</p> <p>Manitoba Conservation and Water Stewardship requires permits for construction of manure storage facilities. As part of the review, operators must identify manure spread fields. In areas of Manitoba which are not considered to be "certain areas" as defined above, Manitoba Conservation and Water Stewardship's current policy for the construction permit is to require an operation to demonstrate access to sufficient land to apply manure at a rate equivalent to 2 times the crop removal rate of phosphorus. The proponent has indicated that sufficient land is available and suitable for manure application; therefore Manitoba Conservation and Water Stewardship is sufficiently satisfied with the proposal for turkey operation in this respect.</p> <p>The Site Assessment has identified proposed spread fields located in the Red River Valley Special Management Area (RRVSMA). Application of manure to spread fields in the RRVSMA must be done in compliance with Section 14.2 of the Livestock Manure and Mortalities Management Regulation (M.R. 42/98).</p> <p>Some spreadfields identified in the Site Assessment to be used by Blumengart Hutterian Mutual Corp. have been identified on Manure Management Plans for other operations as confirmed spreadfields, specifically NE 23-01-04 W, SE 11-04-03 W, NE 02-04-03 W. However, if these fields were excluded from the land base calculation, the operation would still have sufficient suitable land for manure application.</p> <p>Water Stewardship – Water Science and Management: 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</p>	CWS MMG MAFRD

The Audit of: Blumengart Hutterian Mutual Corp.

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		<p>phosphorus inputs from applied manure and other nutrient sources such as commercial fertilizers with crop removal rates to avoid excessive build-up in soils. Consequently, sufficient land base or economically achievable treatment technologies must be available so that manure can be applied at no more than 1 times crop removal rates. Over the short-term, regulations allow manure to be applied at no more than 2 times crop removal rates when soil-test phosphorus is between 60 ppm and 120 ppm. Once phosphorus levels reach 120 ppm, applications of manure would be restricted to no more than 1 times crop removal rates. It should be noted that soil-test phosphorus levels of 60 ppm are well above phosphorus needs for most crops (over 20 ppm is usually considered very high), and that as excess phosphorus levels build up in soils, greater losses occur to surface and ground water. For long-term planning purposes, the proponent needs to have sufficient land available to ensure that manure can be applied at 1 times crop removal.</p> <p>Sufficient land (7042 acres) has been identified by the proponent to ensure that manure can be applied at 1 times crop removal over the long term.</p> <p>MMG The proposed spread fields are designated "AG" Agricultural General Area in the RPGA Development Plan By-law No. 3-2011.and zoned "A40" Agricultural Zone in the Municipality of Rhineland Zoning By-Law No. 2013-8.</p> <p>MAFRD Detailed comments are provided in the Appendix. In summary, in order to satisfy the Province's requirement for P in the RM of Rhineland, it is estimated that Blumengart Hutterian Mutual Corp requires approximately 3028 acres of suitable land. This is also enough land for the manure N. Blumengart Hutterian Mutual Corp submitted a total of 7042 acres of crop land, of which, MAFRD determined all are suitable for manure application. As such, Blumengart Hutterian Mutual Corp has demonstrated that they have more than twice the land required in the RM of Rhineland and that sufficient suitable land is available for the sustainable management of the livestock manure N and P over the long-term.</p>	
9.0 Mortalities Disposal	X	<p>Climate Change & Environmental Protection – Environmental Programs and Strategies: In accordance with the Livestock Manure and Mortalities Management Regulation 42/98, mortalities must be kept in a secure storage room, covered container or secure location; and continuously frozen or refrigerated, if not disposed of within 48 hours after death.</p> <p>Rendering mortalities is acceptable method of disposal.</p>	CWS

The Audit of: Blumengart Hutterian Mutual Corp.

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		<i>The proponent should prepare a contingency plan in case of a catastrophic event resulting in mass mortalities.</i>	
10.0 Project Site Description		<p>MMG <i>The proposed site in question is designated "AG" Agricultural General Area in the RPGA Planning District Development Plan By-law No. 3-2011.</i></p> <p><i>It is zoned "A40" Agricultural Zone in the Municipality of Rhineland Zoning By-Law No. 2013-8 and is in compliance with the site requirements outlined for agricultural development (such as site area, site width, front, rear, and side yard, etc.) as listed in the Bulk Requirements table of the Zoning By-Law.</i></p> <p><i>The proposed livestock operation is also in compliance with the minimum setback and separation distance requirements outlined in the Zoning By-Law.</i></p>	MMG (CRP Regional Office)
10.0 Project Site Description (Native Prairie, Wildlife Mgt Areas, Crown Land)	X	<p>Conservation Programs – Wildlife & Ecosystem Protection: <i>The Conservation Data Centre has no concerns. There are no wildlife related concerns.</i></p> <p>Conservation & Water Stewardship – Lands Branch: <i>Lands Management & Planning Section of Manitoba Conservation and Water Stewardship has no concerns.</i></p>	CWS
11.0 Truck Haul Routes and Access Points	X	<p>MIT <i>This site does not front onto a provincial highway. The nearest provincial highway is PR 306 which is approximately 1.5 to 2.0 miles east of the proposed development. The maximum loading on PR 306 is B1. We do not object to this proposed development.</i></p>	MIT

CWS – Conservation and Water Stewardship

MAFRD- Manitoba Agriculture, Food and Rural Development

MIT – Manitoba Infrastructure and Transportation

MMG- Municipal Government

D. PUBLIC COMMENTS & DISPOSITIONS

N/A

E. CONCLUSIONS & RECOMMENDATIONS

Overall Conclusion

The information contained in the Site Assessment submitted by the proponent generally meets Provincial requirements.

Based on the Site Assessment submitted by the producer and available information, the TRC recommends the following appropriate practices, measures and safeguards be taken;

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 Morden 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 animals units in its Conditional Use Order.
- Council is welcome to contact Manitoba Conservation and Water Stewardship (CWS) to discuss environmental compliance issues, if applicable, with respect to the *Livestock Manure and Mortalities Management Regulation* (M.R. 42/98). The

Technical Review Officer with CWS as well as regional CWS staff can be contacted by council at their discretion.

- 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 Morden Community & Regional Planning Office); and
 - c) every person who made representation at the hearing.

Recommended Actions to Proponent

- In accordance with the *Livestock Manure and Mortalities Management Regulation* (M.R. 42/98), field storage of manure is acceptable provided solid manure cannot escape the field storage area.
- Field storage sites must be changed annually and a crop grown on the storage site to take up any excess nutrients.
- Livestock manure shall be stored until such a time that it can be applied as fertilizer.
- During manure field storage and application all groundwater features, including water wells, should be given as a minimum, the amount of buffer as outlined in the regulations.
- Application of manure to spread fields in the RRVSMAs must be done in compliance with Section 14.2 of the *Livestock Manure and Mortalities Management Regulation* (M.R. 42/98).
- The proponent must submit a Manure Management Plan (MMP) annually to Manitoba Conservation and Water Stewardship in accordance with the *Livestock Manure and Mortalities Management Regulation* (MR 42/98) for any livestock species reaching the 300AU or greater criteria.
- In accordance with the *Livestock Manure and Mortalities Management Regulation* (M.R. 42/98), the proponent must annually submit to Manitoba Conservation and Water Stewardship analytical results from samples of drinking water provided to their livestock.
- All but the most basic wells should be sealed by a well drilling professional.
- The proponent should prepare a contingency plan in the event of a catastrophic event resulting in mass mortalities.

*** And 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.**

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title	Address	Telephone
Don Malinowski Chair	Municipal Government	Senior Planner, TRC Community & Regional Planning Branch	604-800 Portage Avenue Winnipeg	945-8353
Petra Loro	Agriculture Food and Rural Development	Livestock Environment Specialist	545 University Crescent Winnipeg	945-3869
Andrea Bergman	Conservation and Water Stewardship	Technical Review Officer Environmental Approvals Branch	160-123 Main Street Winnipeg	945-4384
Heinz Lausmann	Infrastructure and Transportation	Senior Highway Planning Engineer Highway Planning and Design Branch	1420-215 Garry Street Winnipeg	945-2664

Appendix

Blumengart Hutterian Mutual Corp March 19 2015 Petra Loro, Livestock Environment Specialist

Manitoba Agriculture, Food and Rural Development (MAFRD) reviewed the site assessment for Blumengart Hutterian Mutual Corp as provided by South-man Engineering on February 5 2015 and has the following comments.

Proposed Type and Size of Operation:

Blumengart Hutterian Mutual Corp currently operates layer, pullet, pig and turkey operations as well as a small dairy. They are proposing to expand their turkey operation by adding an additional 18,000 starter places. They have indicated that they currently have 63,800 turkey places of which 51,800 are heavy hens (24,000 of which were added in 2011 without a TRC report) and 12,000 starters (entered in the turkey broiler category as there is no place in the Animal Unit Table for starter turkeys). MAFRD is satisfied that 1889 Animal Units represents all of the livestock associated with Blumengart Hutterian Mutual Corp including the expansion.

Environmental Farm Planning:

Blumengart Hutterian Mutual Corp has indicated they have an up-to-date Environmental Farm Plan.

Land Available/Required for Manure Application:

MAFRD worked with the applicant prior to submission of the site assessment to determine the land required for manure application.

In the Rural Municipality of Rhineland, it is currently the Government of Manitoba's policy to require enough suitable land to allow manure application at a rate that does not exceed the nitrogen (N) uptake or twice the phosphorus (P) that will be removed from the field in the harvested portion of the crop over the course of a rotation. Only lands with Agriculture Capability Class 1 to 5 and recent soil tests demonstrating P levels below 60 ppm Olsen P are considered suitable. Buffer strips and setbacks must be excluded.

Using the MAFRD land calculator, it is estimated that all of the livestock associated with Blumengart Hutterian Mutual Corp will generate approximately 246,954 lbs N and 190,212 lbs P₂O₅ to be land applied. Using the crops and acreages provided by Blumengart Hutterian Mutual Corp, in conjunction with 10 year (2004-2013) MASC yield averages, it is estimated that the average annual crop N uptake to be approximately 108.6 lb/acre and the average annual crop P₂O₅ removal to be approximately 31.4 lb/acre.

Therefore, in order to satisfy the Province's requirement for P in the RM of Rhineland, it is estimated that Blumengart Hutterian Mutual Corp requires *approximately* 3028 acres of suitable land. This is also enough land for the manure N. MAFRD's land estimate

considers only the N and P from the livestock and does not consider nutrients from any other sources.

MAFRD assessed the land provided in the site assessment in order to provide Council with the assurance that adequate suitable land is available for all of the livestock associated with Blumengart Hutterian Mutual Corp. Blumengart Hutterian Mutual Corp submitted a total of 7042 acres of crop land, of which, MAFRD determined all are suitable for manure application (i.e. below 60 ppm Olsen P and Agriculture Capability Class 1 to 5). These parcels have an Agriculture Capability Class of 1, 2 and 3 (prime agricultural land). The soil survey information indicates the land has slight to moderate limitations due to lack of moisture (M), wetness (W) and inundation (I). As such, Blumengart Hutterian Mutual Corp has demonstrated that they have more than twice the land required in the RM of Rhineland and that sufficient suitable land is available for the sustainable management of the livestock manure N and P over the long-term.

Additional Information:

Actual manure application rates will be determined in the annual manure management plan submitted to Manitoba Conservation and Water Stewardship. In order to minimize the risk of nitrate leaching, manure application rates should be based on annual soil tests, crop N requirements and realistic target crop yields. Because manure is rarely a “balanced” fertilizer, repeated, annual N-based manure application rates often result in the build-up of soil test P. Moderate build-up of soil test P enhances soil fertility and benefits crop production, however, excessive build-up of soil test P increases the risk of P being lost to surface water. For this reason, MAFRD recommends that Blumengart Hutterian Mutual Corp manage the fertility of the fields that receive manure to keep all soil tests below 60 ppm P over the long-term. Injection or incorporation of manure within 48 hours of application will also reduce the risk of manure being lost to surface water, particularly if the manure is applied in the fall.

MAFRD provides extension support and computer software to help producers complete manure management plans. If the operation uses professional services to prepare the plan, manure management planners must successfully complete the Manure Management Planners Course offered by the Assiniboine Community College and be a member in good standing in the Manitoba Institute of Agrologists or a Certified Crop Advisor. Blumengart Hutterian Mutual Corp has indicated that they will be land applying all of the manure. In the future, if the services of a Commercial Manure Applicator are obtained to apply the manure, the applicator must be trained by the Assiniboine Community College and licenced by MAFRD.

Under *The Farm Practices Protection Act*, any complaints about odour or other disturbances (such as flies, smoke, noise or dust) can be directed 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 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.