

TECHNICAL REVIEW COMMITTEE

A TECHNICAL REVIEW REPORT PREPARED FOR

THE RURAL MUNICIPALITY OF DE SALABERRY

GROUP WESTCO INC. SE 15-04-03E

TRC 12-012

August 12, 2014

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: Group Westco Inc.

Site Location: Approximately 7 kms south west of St. Malo on 20 Mile Rd. N.

R.M. of De Salaberry (SE 15-04-03 EPM) Refer to map below.

Proposal: To establish a 212,000 broiler operation (1,060 Animal Units). This will involve the following:

- Constructing three barns
- Field storing manure
- Consuming 7,420 imperial gallons of water per day
- Composting mortalities on site
- Using the truck haul routes as shown below



LEGEND
____ shipping in route

____ shipping out route

C.SITE ASSESSMENT AUDIT

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	This is a proposal to build 3 barns for 212,000 broiler chickens totalling 1060 animal units.	MAFRD
5.0 Animal Confinement Facilities	ClimateChange& EnvironmentalProtectionEnvironmental Programs and StrategiesManitobaConservation and WaterStrategiesManitobaConstruction of manure storage facilities (MSF) by require the proponent to submit an "Application for Permit Construct, Modify or Expand a Manure Storage Facility". T definition of MSF does not include gutter or pit (including und barn storage) used to contain liquid or semi-solid manure less than 30 days for the purpose of moving the manure to storage facility.		cws
6.0 Environmental Farm Planning	x	This is a new operation so there is no Environmental Farm Plan.	MAFRD
7.0 Water X		Climate Change & Environmental Protection - Environmental Programs and Strategies The proposed operation is a new facility and not yet constructed, therefore the producer has not submitted Source Water Monitoring analysis. Mater Science and Management 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/water info/misc/abandoned 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/water_q uality/wells groundwater/well drillers.html.	cws

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department	
		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.		
		Reconnaissance soil survey maps indicate that SE ^{$1/4$} 5-4-3 EPM, N ^{$1/2$} 5-4-3 EPM and N ^{$1/4$} 15-4-3 EPM contain 3rd order drains. The setback for 3rd order drains is 15 metres assuming manure is broadcast without incorporation and the adjacent buffer is permanently vegetated. In addition, the proponent must not apply nutrients directly to 1st and 2nd order drains.		
	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);			
Water Use Licensing		Water Use Licensing		
		As indicated in the proposal, the project will be using Blue Clay Colony's well. Blue Clay Colony has an existing Water Rights License and has applied to amend their Water Rights License for the required increase of allocation.		
		<u>Climate Change & Environmental Protection -</u> Environmental Approvals		
		No concerns regarding this proposal.		
		<u>Climate Change & Environmental Protection -</u> Environmental Compliance and Enforcement		
8.0 Manure Related		Environmental Compliance and Enforcement (Eastern Region) has reviewed the above noted Proposal (Site Assessment) and has no comments.		
	x	<u>Climate Change & Environmental Protection -</u> Environmental Programs and Strategies	CWS	
		Based on the number of proposed Animal Units, Groupe Westco will be required to submit an annual Manure Management Plan by the regulated deadline for the storage, handling, disposing, or application of any livestock manure.		
		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. The field storage site must be changed annually and a crop must be grown on the emptied manure storage area.		

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department	
8.1 Land Available/Required for Manure Application	X	 MAFRD Detailed explanation of MAFRD's land assessment can be found in Appendix A. Using the new land calculator published in June 2014, MAFRD estimates that Group Westco Inc and Blue Clay Colony combined require a total land base of approximately 2880 acres of suitable land to satisfy the Province's requirement for the manure P. This is also enough land for the manure N. Group Westco Inc has identified 4093 suitable acres with recent soil tests for manure application. As such, Group Westco Inc has identified that sufficient suitable land is available to satisfy the Province's requirements for N and P. Group Westco Inc has indicated that sufficient suitable land is available to satisfy the Province's requirements for N and P. Group Westco Inc has indicated that there are an additional 2874 acres of land without recent soil tests for a total of 6967 acres of crop land that will be available for manure application. This is enough land to balance manure P with crop P removal over the long-term. Climate Change & Environmental Protection - Environmental Programs and Strategies 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 as well as Census data in order to estimate the 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 De Salaberry is not considered to be a "certain area". Manitoba Conservation and Water Stewardship requires permits for construction of manure application for both operations. Over the long-term planning horizon the proponent has identified 6063 acres may be required to balance phosphorus inputs and removal.	MAFRD CWS MMG	

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		storage facility is submitted, the proponent must provide the spreadfield availability and the land base required for the operation. Any deficiencies identified by Conservation and Water Stewardship must be addressed prior to issuance of the permit.	
		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 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;	
		As Group Westco Inc. and Blue Clay Colony will be using the same land base for manure application from their combined livestock enterprises, the calculation of aggregated manure production from both livestock enterprises is required. Group Westco Inc. has identified 4093 suitable acres with recent soil tests for manure application. Further, Group Westco has indicated an additional 2874 acres of land without recent soil tests for a total of 6967 acres of crop land that will be available for manure application. This combined land base will ensure that manure phosphorus can be balanced with crop phosphorus removal over the long term.	
		MMG Manitoba Municipal Government notes the proposed spread fields are designated and zoned for agricultural use in the RM of De Salaberry, Montcalm and Franklin Development Plan and Zoning By-law.	

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
9.0 Mortalities Disposal	x	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. Composting mortalities is acceptable provided the composting site is located at least 100-meters from any surface watercourse, sinkhole, spring or well, and the operation's boundaries. Mortalities must be composted in a manner that does not cause pollution of surface water, groundwater or soil, and the composting facility and process must be acceptable to the Director of Manitoba Conservation and Water Stewardship. Application of composted mortalities to land is prohibited between November 10 of one year and April 10 of the following year. The proponent should prepare a contingency plan in case of a catastrophic event resulting in mass mortalities. The proponent is required under section 15(6) of the Livestock Manure and Mortalities Management Regulation to report a mass mortality event to Conservation and Water Stewardship; mortalities must be disposed in accordance with the Environment Officer's instructions.	CWS
10.0 Project Site Description	X	The proposed livestock operation is located in the RM of De Salaberry. The surrounding area is all designated Agriculture 2 and zoned Agriculture 2 which allows for considering the establishment of the facility at this location through the Special Use and Conditional Use process. There are approximately 3 residences within a one mile radius of the proposed livestock operation. The primary surrounding land uses are cultivated land and other livestock operations. The landscape is relatively flat with a number of drainage ditches meandering through the area. The Development Plan policies for "Agriculture 2 Area" accommodate a full range of agricultural uses, including livestock production operations and manure applications. The property is zoned "A-2" Agriculture 2. The requirements of the Zoning By-law are new livestock operations producing 1060 a.u. shall have a site area of 80 acres which this proposal meets. A variance order may be needed depending on what Council sets as the minimum site width, and minimum	MMG (CRP Regional Office)

Site Assessment Sections	Meets Requirements for TRC Review (type "X")	Comment	Reviewing Department
		yard requirements for this livestock operation. (See Appendix B for detailed comments.)	
10.0 Project Site Description (Native Prairie, Wildlife Mgt Areas, Crown Land)The CDC has reviewed thisXLands Management & Plan forward as the proposal doe lands as presented in the re- lands disposition (e.g. authorizations etc); when		Conservation Programs - Wildlife & Ecosystem Protection The CDC has reviewed this application and has no concerns. Lands Management & Planning Section: Land Management & Planning Section has no concerns to forward as the proposal does not appear to impact any Crown lands as presented in the report. Proponent should be advised that any Crown land impacts or use for the purposes of the proposal will be subject to Crown lands disposition (e.g. General Permits/ work permit authorizations etc); where applicable as per The Crown Lands Act.	cws
11.0 Truck Haul Routes and Access X		This proposed operation is not adjacent to a provincial highway, nor does it have direct access onto a provincial highway. Based on the available information we do not need any additional information, nor do we object to this proposal.	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

E.CONCLUSIONS & RECOMMENDATIONS

Overall Conclusion

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 Steinbach Community & Regional Planning Office)
 - (3) all adjacent planning districts and municipalities, and
 - 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.
- 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 Steinbach Community & Regional Planning Office); and
 - c) every person who made representation at the hearing.
- A Variation Order may be needed depending on what Council sets as the minimum site width, and minimum yard requirements for this livestock operation.

• NOTE: Both the conditional use order and variation order can be dealt with by Council at the same time through a combined conditional use and variation order Public Hearing. It is recommended that during the course of this Public Hearing Council first deal with the matter of the conditional use order.

Recommended Actions to Proponent

- 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.
- The field storage site must be changed annually and a crop must be grown on the emptied manure storage area;
- Livestock manure shall be stored until such a time that it can be applied as fertilizer.
- 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).
- Any 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.
- In accordance with the *Livestock Manure and Mortalities Management Regulation*, the proponent must annually submit to Manitoba Conservation and Water Stewardship analytical results from samples of drinking water provided to their livestock.
- The proponent should prepare a contingency plan in the event of a catastrophic event resulting in mass mortalities.
- The proponent must obtain from the Council of the RM of De Salaberry a Conditional Use Order approving the proposed 1,060 AU broiler chicken operation.
- The proponent must obtain a variation order from the Council of the R.M. of Hanover to vary the minimum site area from 160 acres to 80 acres.

* 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.

The overall conclusion represents the consensus of the TRC Members.

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 Programs & Strategies Branch	1007 Century 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 A

Land Base Assessment for Group Westco Inc TRC Report July 15, 2014 Petra Loro, Livestock Environment Specialist

Manitoba Agriculture, Food and Rural Development (MAFRD) assessed the land base for manure application as provided by the proponent in order to provide Council with the assurance that adequate suitable land is available for this operation. The Province will require sufficient suitable land when the proponent applies for the manure storage structure permit.

In the Rural Municipalities of De Salaberry and Montcalm 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 two times (2X) the phosphorus (P) that will be removed from the field in the harvested portion of the crop. 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.

Group Westco Inc has indicated that they have access to 6967 acres of land for manure application through Blue Clay Colony. They have submitted soil tests for 4093 acres of land with phosphorus levels below 60 ppm Olsen P. This land is primarily in the RM of De Salaberry with some fields in Montcalm. These parcels have an Agriculture Capability Class of 2 and 3 (prime agricultural land) according to reconnaissance level soil survey with slight to moderate limitations due to wetness (W).

Group Westco Inc provided an initial estimate of the land requirements using a revised version of a land calculator that was under development and provided by MAFRD. In June 2014, MAFRD finalized and published the new calculator here: http://www.gov.mb.ca/agriculture/environment/nutrient-management/land-base-requirements-for-new-and-expanding-livestock-operations.html

Because the manure is being applied to land owned or under the control of Blue Clay Colony, all of the livestock and land available for manure application must be considered in the land assessment. Crop nutrient uptake and removal was based on the crop rotation provided by Group Westco Inc and (2003-2013) MASC yield averages for the crops for soil zones D and E in the RMs of De Salaberry and Montcalm.

Using the new land calculator, MAFRD estimates that Group Westco Inc and Blue Clay Colony combined require a total land base of *approximately* 2880 acres of suitable land to satisfy the Province's requirement for the manure P. This is also enough land for the manure N. Group Westco Inc has identified 4093 suitable acres with recent soil tests for manure application. As such, Group Westco Inc has demonstrated that sufficient suitable land is available to satisfy the Province's requirements for N and P.

Group Westco Inc has indicated that there are an additional 2874 acres of land without recent soil tests for a total of 6967 acres of crop land that will be available for manure application. This is enough land to balance manure P with crop P removal over the long-term.

MAFRD also reviewed the soil test reports provided by the operation. In Manitoba, manure application to land is regulated on the basis of residual soil nitrate-N limits and P thresholds. The fields identified for manure application include Class 2 and 3 soils (except 3M and 3MW) for which the residual soil nitrate-N limit is 140 lbs/acre. Manure application must be managed to ensure that soils do not exceed this residual soil nitrate-N limit.

All of the fields identified for manure application are currently below 60 ppm Olsen P, with some fields testing under 10 ppm Olsen P. Fields with very low to low soil test P will respond well to fertilizer or manure P in most years and are excellent recipients for manure, particularly if they are Agriculture Capability Class 2 and 3. Manure can be applied to meet the nitrogen requirements of the crop on these fields. This often results in more P being applied than is removed from the field and a build-up of soil test P. These fields will also benefit from moderate build-up in soil test P.

No more than 2 times crop removal rates for P can be applied when soil-test P is between 60 ppm and 120 ppm. If soil test levels reach 120 ppm Olsen P, manure application rates will be further restricted to no more P than what is removed in the harvested portion of the crop over the course of a rotation. It is recommended that Group Westco Inc and Blue Clay Colony manage the fertility of the fields that receive manure to keep all soil tests below 60 ppm P over the long-term in order to maintain flexibility in the manure management plan and to reduce the risk of P being lost to surface water in runoff.

Actual manure application rates will be determined in the manure management plan submitted to Manitoba Conservation and Water Stewardship. 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. 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 licensed 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.

Appendix B

Group Westco	Technical Review
SE 15-4-3 E	July 25, 2014
Rural Municipality of De Salaberry	Manitoba Municipal Government

1 Introduction

Group Westco is proposing to develop new chicken barns accommodating 212,000 Broilers. After construction the total number of animal units will be 1,060 on 80 acres in the SE 15-4-3E in the Rural Municipality of De Salaberry. The livestock operation is approximately 2.5 miles east of PR 200, and approximately 4 miles south PTH 23. The proposed site is held by under Certificate of Title No 2696992.

Solid manure will to be stored on site in field storage. Manure generated by the operation will be applied on 6967 acres of identified spread fields via broadcast and incorporated within 48 hours. The proponents are the owners of 80 acres and have agreements with the owners of the remaining 6887 acres which are located in the RM of De Salaberry, Montcalm and Franklin.

The applicant does not propose any odour control measures

Manitoba Municipal Government noted that the proposed spread field are designated and zoned for agricultural use in the RM of De Salaberry and Franklin *Developments Plan* and *Zoning By-law*.

2 Land Use Regulations

2.1 Development Plan and Zoning By-law

The proposed livestock expansion is located entirely within the RM of De Salaberry. With respect to the Development Plan, the operation is designated "**Agriculture 2**". Policies associated with this designation accommodate a full range of agricultural uses, including livestock production operations and manure application.

- Policy 9.9 states "Livestock production operations shall be prohibited on soils with a dry land agricultural capability rating of Class 6, Class 7 and unimproved organic soils based on detailed soil surveys".
- Policy 9.12 states "Livestock operations shall not be permitted to establish and existing livestock operations shall not be permitted to expand within areas designated Serviced Community, Rural Residential and Recreation area".

The site of the proposed expansion is zoned "**A2**" *Agricultural* Two *Zone* according to the *Rural Municipality of De Salaberry Zoning By-law*. New livestock uses in this zone are listed as "*Special Use*" The Zoning By-law requirements that apply to the proposed 1,060 A.U. livestock production operation are summarized below:

• Part 3.24(3)(a) states the establishment of new livestock operations, after the date of the adoption of this by-law, must adhere to setbacks identified in Table 3.2 of this part and to the site requirements

2.2 Land Use in Vicinity of the Proposed Expanded Operation

The surrounding area is all designated Agriculture 2 and zoned Agriculture 2. There are approximately 3 residences within a one mile radius of the proposed livestock operation. The primary land use within a mile radius of the proposed operation is agriculture. The area of the proposed operation is characterized by a mixture of agricultural land uses, including cropland and a variety of livestock operations. The landscape is relatively flat and almost all land is under cultivation. A number of drainage ditches meander through the area.

- 2.3 Compliance of the Proposed Livestock Operation with affected Zoning Bylaw, and Farm Practices Guidelines and Farm Practices Guidelines
 - COMPLIANCE OF THE PROPOSED EXPANSION WITH THE AFFECTED ZONING BY-LAW, ARE SUMMARIZED IN THE TABLE BELOW:

Table 1: Compliance with Provincial Guidelines, Regulation and Zoning By-law				
Zoning By-law	Minimum criteria	Proposed	Compliance	
Site area	80 ac.	80 ac.	Yes	
Site width	Determined by Council	1320 ft	Unknown	
Front Yard	Determined by Council	150 ft	Unknown	
Minimum side and rear yard	Determined by Council	140 ft.	Unknown	
Number of residences within a mile	8	3	Yes	
Separation distance to nearest residence	1230 ft.	1750 ft.	Yes	

3 Discussion/Conclusions

- The proposed livestock operation appears to meet the policies of the Development Plan and the requirements in the Zoning By-law.
- A variance may be needed depending on what Council sets as the minimum site width, and minimum yard requirements for this livestock operation.

Stephen Walker, Regional Manager