



TECHNICAL REVIEW COMMITTEE

**A TECHNICAL REVIEW REPORT
PREPARED FOR**

**THE RURAL MUNICIPALITY
OF
HANOVER**

**BURNBRAE FARMS LTD.
SE 5-6-5 EPM**

TRC 12 – 032

February 16, 2018

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
 - 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, MR) 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 PROCESS

TRC Process Chart with actual pertinent dates and brief overview

The Technical Review Process: TRC-12-033 – Burnbrae Farms Ltd.



B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description, go to

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

Applicant: Burnbrae Farms Ltd.

Site Location: Approximately 4.93 miles (7.9 km) east of PTH 59 and the Community of St Pierre-Jolys or 2.82 miles (4.5 km) north of the Community of Grunthal, at SE 5-6-5 EPM. Please refer to maps below.

Proposal: To expand a current chicken operation from 81,984 layer hens (680 AU) to 90,000 layer hens (747 AU) with 2 batches of 37,500 additional Pullets per year (124 AU) for an overall change in Animal Units from 680 to 871 in an animal confinement facility.

This will involve the following:

- Construction of two new buildings in areas at sufficient distance from nearest residential development
- Construction of a new manure storage facility attached to a new layer barn to facilitate storage of manure from proposed increase in chicken population, along with
- Manure storage through use of an existing Engineered solid manure storage facility and field storage
- Consuming 7,095 imperial gallons of water per day from an existing well
- Mortalities to be dealt with by way of incineration in an approved incinerator
- A permanent composting site exists onsite
- Using the truck haul routes as shown below

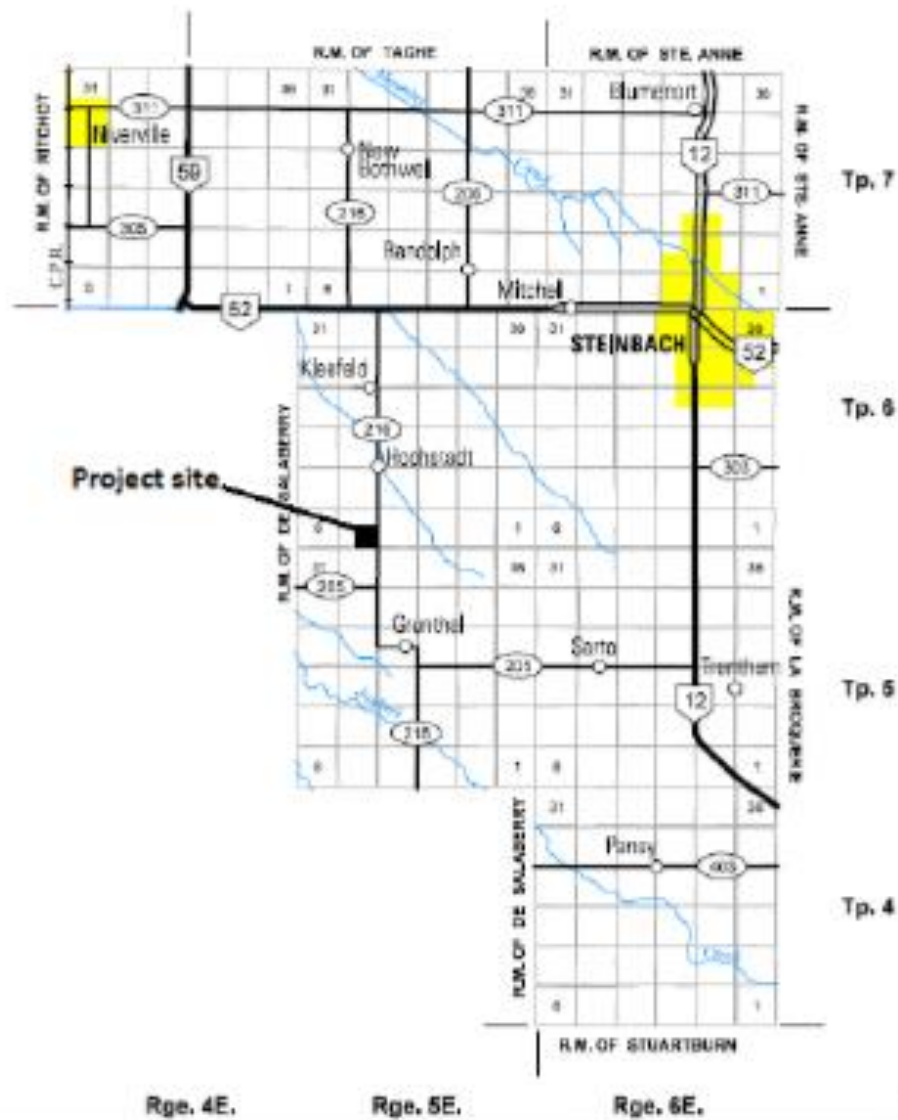


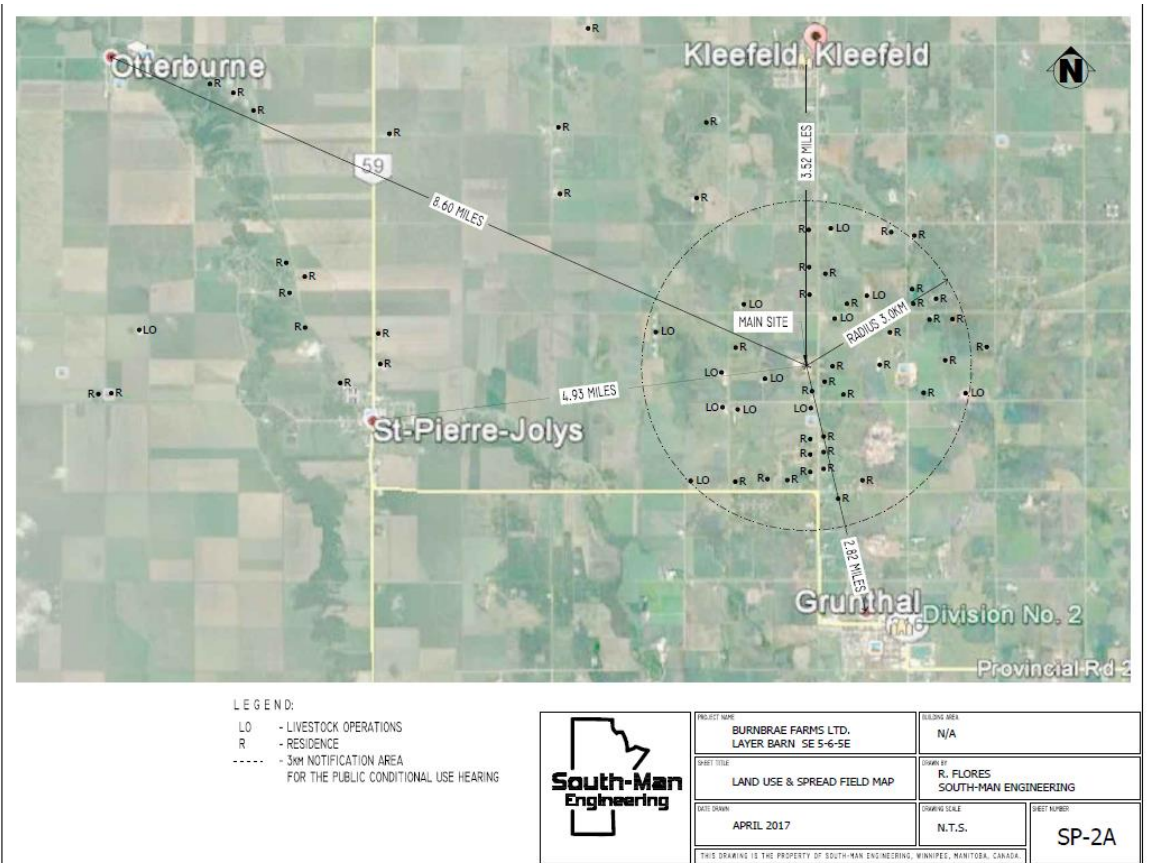
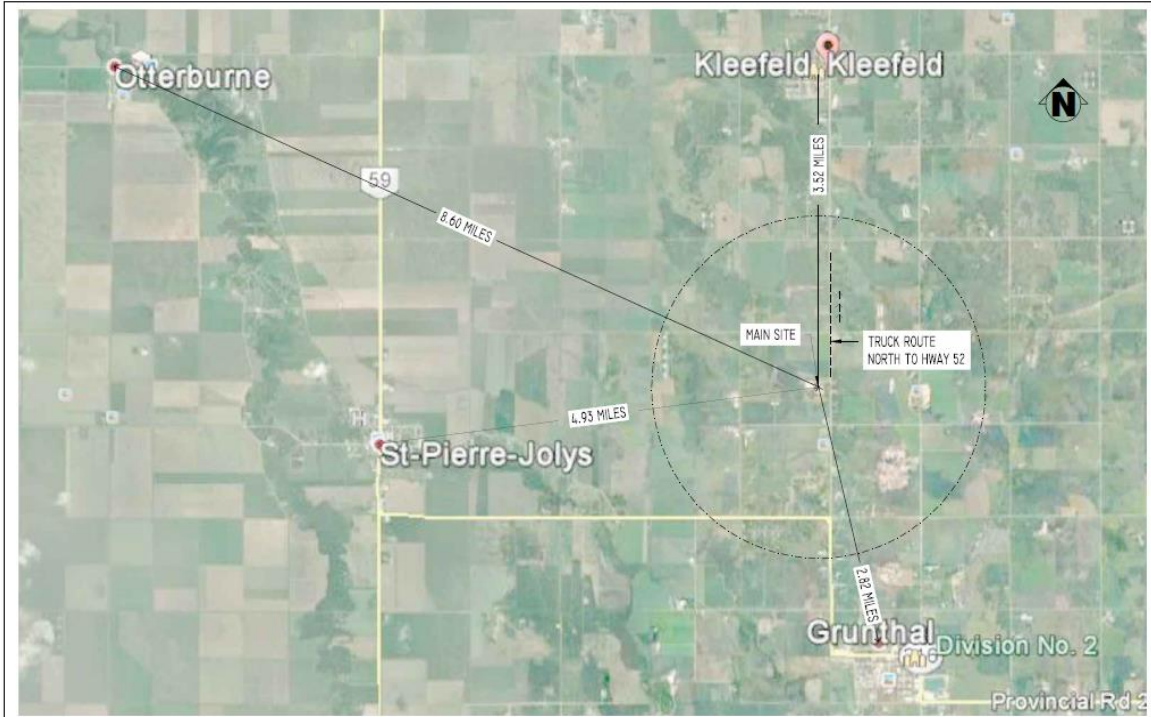
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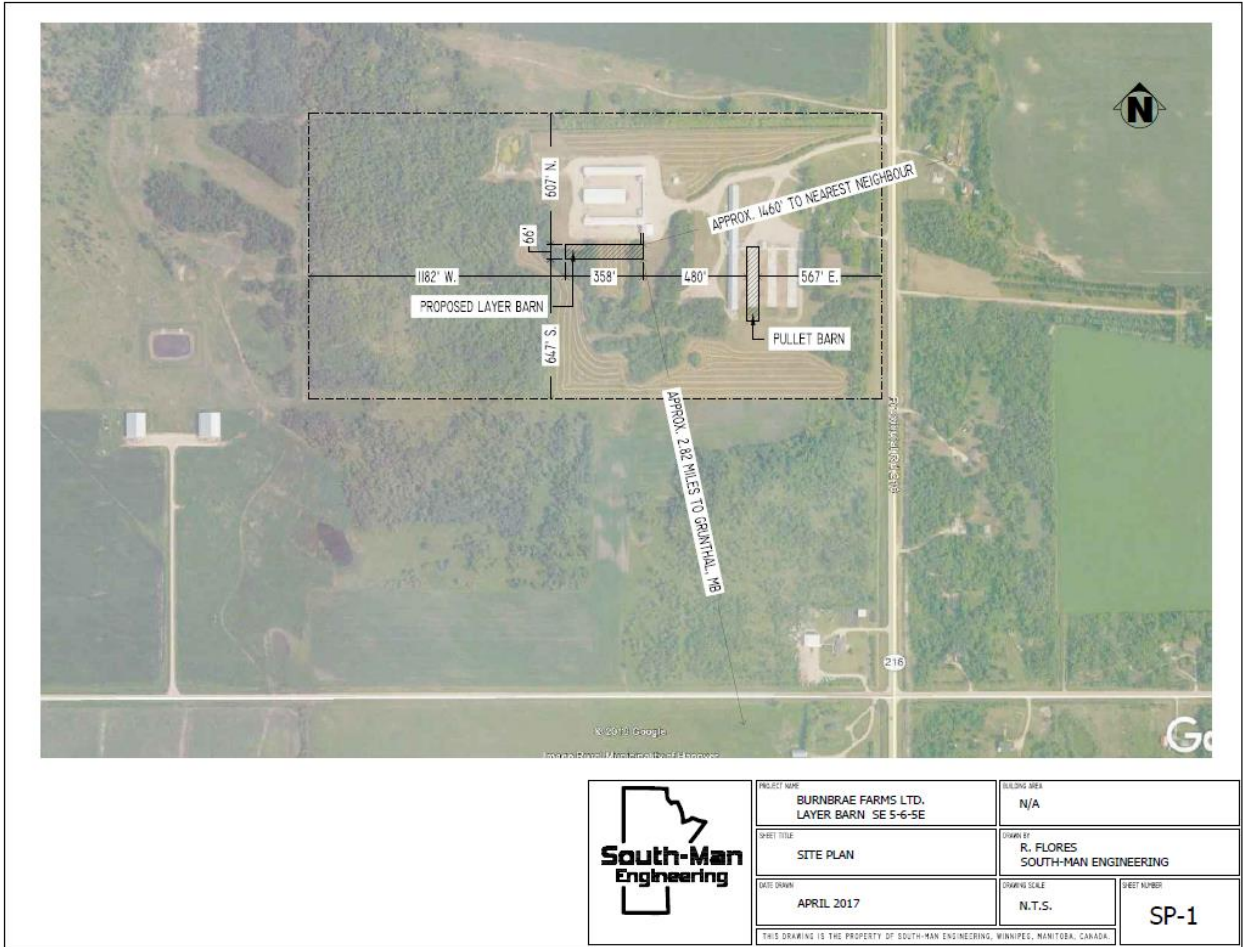
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 INFRASTRUCTURE
 HIGHWAY PLANNING AND DESIGN BRANCH
 GEOGRAPHIC & RECORDS MANAGEMENT SECTION
 WENEEPA
 JANUARY 2015

LEGEND

PROVINCIAL TRUNK HIGHWAYS		ACCESS ROADS	
PROVINCIAL ROADS		RAILWAYS	







C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of: TRC 12-032 – Burnbrae Farms Ltd.			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
1. Submitted complete Site Assessment	X	The proposal is consistent with the Provincial requirements for a Livestock Operation.	MR
2. Clearly defined the project as an _X_ Animal Confinement Facility	X	Construction of a new Layer Barn and Pullet Barn will accommodate an increase in number of livestock from 680 A.U. to 871 A.U. in an animal confinement facility.	MR
3. Proposed Project Site Physical Suitability	X	This is a proposed expansion of an existing site.	AG
4. Proposed Project Site Flood Risk Potential	X	Water Management, Planning and Standards is not aware of any major overland flood hazard at this location.	MI
5. Identified 7,095 imperial Gallons/day required for proposed operation	X	Operations with >5,499 imperial gallons require a Water Rights License. More information, including the SD contact information is provided in Section 7.4 of the site assessment.	SD

Provincial Technical Overview of: TRC 12-032 – Burnbrae Farms Ltd.

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
9. Proposed Project Site that meets development plan and zoning by-law requirements	X	<p>The proposed livestock operation expansion is on land designated as Rural Area pursuant to the RM of Hanover Development Plan By-Law No. 2170. The proposal complies with Development Plan Policies 3.3.5 & 3.3.7 pertaining to the expansion of existing livestock operations.</p> <p>The proposed livestock operation expansion is on land zoned “R” – Rural Zone pursuant to the RM of Hanover Zoning By-Law No. 2171. Expansion of existing livestock operations to 300 or more animal units are required to have a minimum site area of 160 acres, and a minimum site width of 1000 feet. However, existing livestock operations may be allowed to expand on an existing site of less than 160 acres provided they comply with all environmental regulations and separation distances. The site is ±4410 feet from the nearby Rural Residential Area located in SE 32-5-5EPM, and therefore does not meet the minimum separation distance of 5249 feet required between a livestock operation of 801-1600 AU and a designated area. As such, the minimum site area requirement of 160 acres remain, and a variance order is required to vary the minimum site area.</p> <p><i>The Planning Act</i> requires municipalities to issue development permits for any development on a site. All development must comply with the Zoning By-law and Development Plan. Any proposed development that does not meet the separation distances or setbacks requires Council approval and a public process to vary those requirements.</p>	MR
10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.	X	Distances to these features is provided in section 10.5 of the site assessment. Where the distances exceed 1 mile, the department generally has no objection.	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	In order to determine the land requirement for Burnbrae Farms Ltd., nitrogen and phosphorus excretion by all of the birds is compared to nitrogen utilization and phosphorus removal by the crops to be grown. The land requirement takes into consideration realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation	Ag

Provincial Technical Overview of: TRC 12-032 – Burnbrae Farms Ltd.

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
		<p>(MASC) for the RMs of Ritchot and De Salaberry.</p> <p>In the RMs of Ritchot and De Salaberry, new and expanding livestock operations 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, Burnbrae Farms Ltd. is required to demonstrate that they have access to at least 1337 acres for manure application.</p> <p>Land suitability was determined using soil testing for phosphorus and soil survey to establish the agriculture capability. All of the soil tests were below 60 ppm Olsen P, as required to be considered suitable. According to detailed soil survey, the agriculture capability of the suitable land included in the proposal varies from Class 1 to 3. The primary limitation is wetness (W).</p> <p>Burnbrae Farms Ltd. has demonstrated that they have access to 1365 suitable acres for manure application. This satisfies the current land requirement.</p>	
12. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from natural features (water sources etc.)	X	The proponent is required to demonstrate minimum setback distances listed in section 10.6 of the site assessment.	SD
13. Proposed Spreadfields with sufficient minimum setbacks on spread fields from natural features (water sources etc)	X	Section 8.7 requires the proponent to indicate if all setbacks have been observed from and excluded from land base calculations.	SD
14. Proposed Spreadfields that have been secured by spread agreements	X	All of the lands available for manure application are under agreement.	Ag

Provincial Technical Overview of: TRC 12-032 – Burnbrae Farms Ltd.

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
15. Proposed Spreadfields that meet development plan and zoning by-law requirements	X	<p>All the proposed spreadfields in the RM of Ritchot are located on lands designated GZ – Green/Agricultural Policy Area, with some parts (areas surrounding the Red and Marsh Rivers) designated Environmental Policy Area. They meet the intent of the Macdonald-Ritchot Development Plan By-Law No. 2-2010 policy 4.3.1.</p> <p>All the proposed spreadfields in the RM of Ritchot are zoned AR – Agricultural Restricted, and complies with the Macdonald-Ritchot Zoning By-Law No. 18-2002.</p> <p>All the proposed spreadfields in the RM of De Salaberry are located on lands designated Agriculture 1, except the spreadfield located on NE 32-6-3EPM, which is designated Agriculture 2. They all meet the intent of the RM of De Salaberry Development Plan By-Law No. 2194-04 Policy 9.0.2.</p> <p>All the proposed spreadfields in the RM of De Salaberry are zoned Agriculture 1 Zone, except the spreadfield located on NE 32-6-3 EPM, which is zoned Agriculture 2 Zone. They comply with the RM of De Salaberry Zoning By-Law No. 2208-05.</p>	MR
16. Proposed trucking routes and access points that may impact Provincial Roads or Provincial Trunk Highways	X	<p>PR 216 is the proposed truck haul route. The subject property has frontage along PR 216 with three existing access, the most northerly access appears to be shared/joint with the quarter section to the north.</p> <p>Please be advised that our department will not approve any additional access onto PR 216. If in the future there are any upgrades to PR 216, our department will look at rationalizing the residual access and possibly removing one.</p> <p>Please be advised that any structures placed within the controlled area of PR 216 (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 placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PR 216 requires permission from our regional office in Steinbach. Please contact the Acting Regional Planning Technologist (Robert Fender) at (204) 371-6858. In addition, please notify the Acting Regional Planning Technologist for the placement of temporary draglines or other temporary equipment for manure application within the controlled area of PR 216 (125 feet from the edge of the right-of-way).</p>	MI

Provincial Technical Overview of: TRC 12-032 – Burnbrae Farms Ltd.			
Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
17. Proposed trucking routes – local roads	X	Under <i>The Planning Act</i> , municipalities as a condition of approval may require Burnbrae Farms Ltd. to enter into a Development Agreement regarding the condition and upkeep of local roads used as truck haul routes.	MR
18. Declared Provincial Waterways	X	Three of the identified spread fields are adjacent to Tourond Creek, a Provincial Waterway. As per the Water Resources Administration Act, all activities crossing or on Provincial Waterways, including the temporary use of manure hoses, must acquire a Provincial Waterway Authorization from Manitoba Infrastructure, Water Management, Planning and Standards. Applications can be obtained by emailing MITWaterReview@gov.mb.ca.	MI

Provincial Departments

- Ag – Agriculture
- MR –Municipal Relations
- MI – Infrastructure
- SD – Sustainable Development

D. PUBLIC COMMENTS & DISPOSITIONS

No comments or concerns submitted.

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 Steinbach 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 Steinbach Community & Regional Planning Office);
and
 - c) every person who made representation at the hearing.
- The proponent must obtain a variation order from Council for the separation distance between the project site and the Rural Residential Area at SE 32-5-5 EPM in accordance with the RM of Hanover Zoning By-law. 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 and regardless of the outcome on that matter, proceed next to deal with the matter of the variation order.

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 the proponent proceeds to apply to the RM of Hanover for the required Variance related to the separation distance between the project site and the Rural Residential Designated Area at SE 32-5-5 EPM. The requested Variation may be able to be dealt with at the same hearing as the Conditional Use Permit Application if applied for in a timely manner.

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

F. TECHNICAL REVIEW COMMITTEE MEMBERS

Name	Department	Title	Telephone
Don Malinowski Chair	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

LIVESTOCK TECHNICAL REVIEW COMMITTEE

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Burnbrae Farms Ltd.
PROPOSAL NAME: Dennis Hiebert
TYPE OF OPERATION: 871 Animal Unit Pullets and Layers
RURAL MUNICIPALITY: Hanover
OPERATION LOCATION: SE 05-06-05 EPM

Environmental Stewardship Division; Environmental Approvals Branch

No concerns.

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

No concerns.

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

- All unused water 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 and the sealed well report are available from Sustainable Development (204-945-6959) or:
http://www.gov.mb.ca/sd/waterstewardship/water_quality/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 is located at:
http://www.gov.mb.ca/waterstewardship/water_quality/wells_groundwater/well_drillers.html .
- During manure application all groundwater features, including water wells, should be given as a minimum, the amount of buffer as outlined in the regulations.
- 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 in order 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 apply solid poultry manure to annual cropland by surface broadcast followed with incorporation. To reduce the risk of runoff losses of nitrogen and phosphorus, application should not occur to saturated, frozen or snow covered soils or when heavy rainfall is expected within 24 hours. All spread fields are within the Upper Red River Designated Flood Area and are at risk of inundation at the time of spring snowmelt runoff. Because incorporation generally leaves a portion of the manure on the soil surface, risk of nutrient loss in runoff from solid manure applications is lowest when applications are completed in spring. However, when this is not possible risk can be reduced if application of solid manure occurs by mid-October or earlier (even when incorporated, 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 or in the spring).
- Manure tends to have an excess of phosphorus (P) compared to nitrogen (N) and as a result, for most crops, application at N based rates causes a buildup of soil P.
- 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. The proponent has identified 1365 acres of land suitable for manure application. Under current cropping practices, this will allow for phosphorus application at the 2 times crop removal rate. Application of phosphorus at the 2x crop removal rate will slow the rate of phosphorus buildup but contrary to the claim made in the proposal (section 14.0) this is not environmentally sustainable over the long term. Consequently, in future 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 to ensure long-term sustainability. It should be noted that Olsen 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. It is also important to rotate manure application across all spread fields so as to prevent excessive P buildup.
- Field storage of manure in the Upper Red River Designated Flood Area may require additional safeguards to minimize the risk of nutrient loss to surface waters.

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

The site assessment states that the water source is an existing well and that the volume is over the domestic use threshold, therefore it requires a Water Rights Licence and the proponent must submit an Application for Licence to Divert Groundwater. See our Website for more information and application form:

http://www.gov.mb.ca/sd/waterstewardship/licensing/wlb/water_use.html

or call (204) 945-3983

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

Land Management & Planning Section has no comments as no Crown lands (surface tenure) are proposed to be impacted by the proposal's intent or use.