



TECHNICAL REVIEW COMMITTEE

**A TECHNICAL REVIEW REPORT
PREPARED FOR**

**THE RURAL MUNICIPALITY
OF**

GREY

DIVORNE FARMS LTD.

SE 8-8-6 WPM

TRC 12 – 030

August 22, 2017

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 (MR); Community Planners
 - Infrastructure (MI); Development Review Technologists, Engineering and Operations Division; Development Review Officers, Water Management and Structures Division
 - Sustainable Development (SD); 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

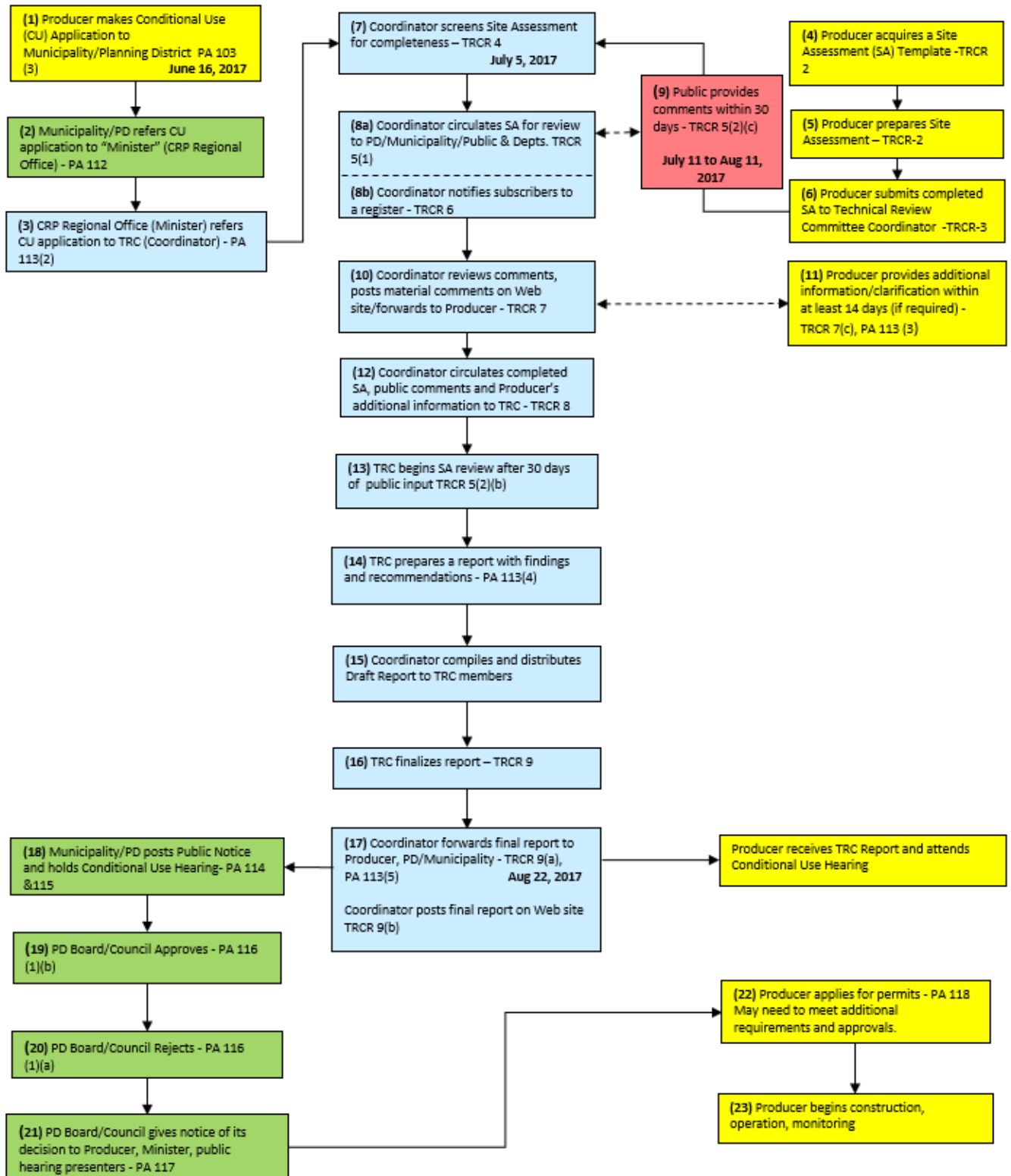
To provide objective, highly credible, technically-based assessments that:

- 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.

**TRC-12-030
Divorve Farms Ltd.**



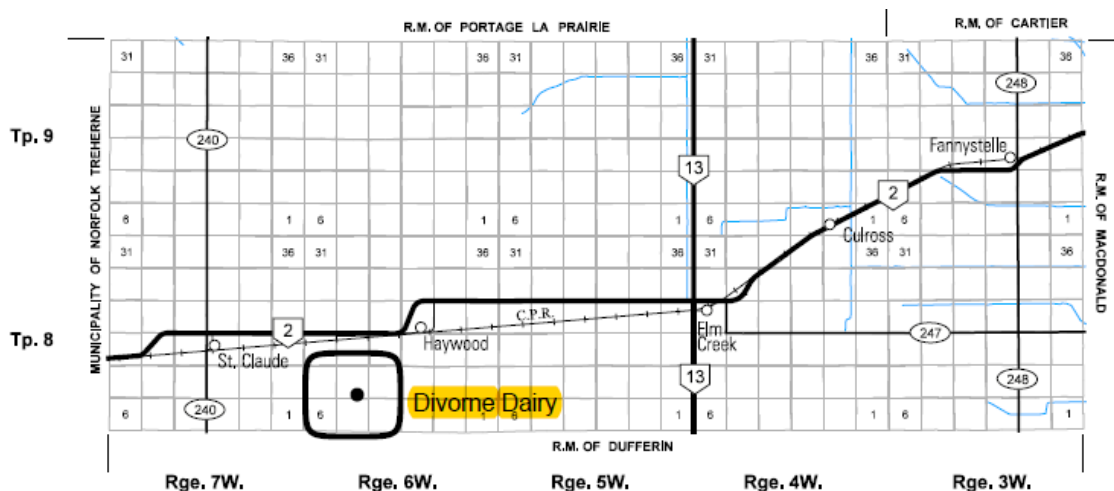
B. DESCRIPTION OF PROPOSED LIVESTOCK OPERATION

To view a detailed description go to

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

Applicant: Divorve Farms Ltd.

Site Location: Approximately 4 miles south east of the Community of St.Claude; approximately 2 miles south of PTH No. 2 (8-8-6 WPM);

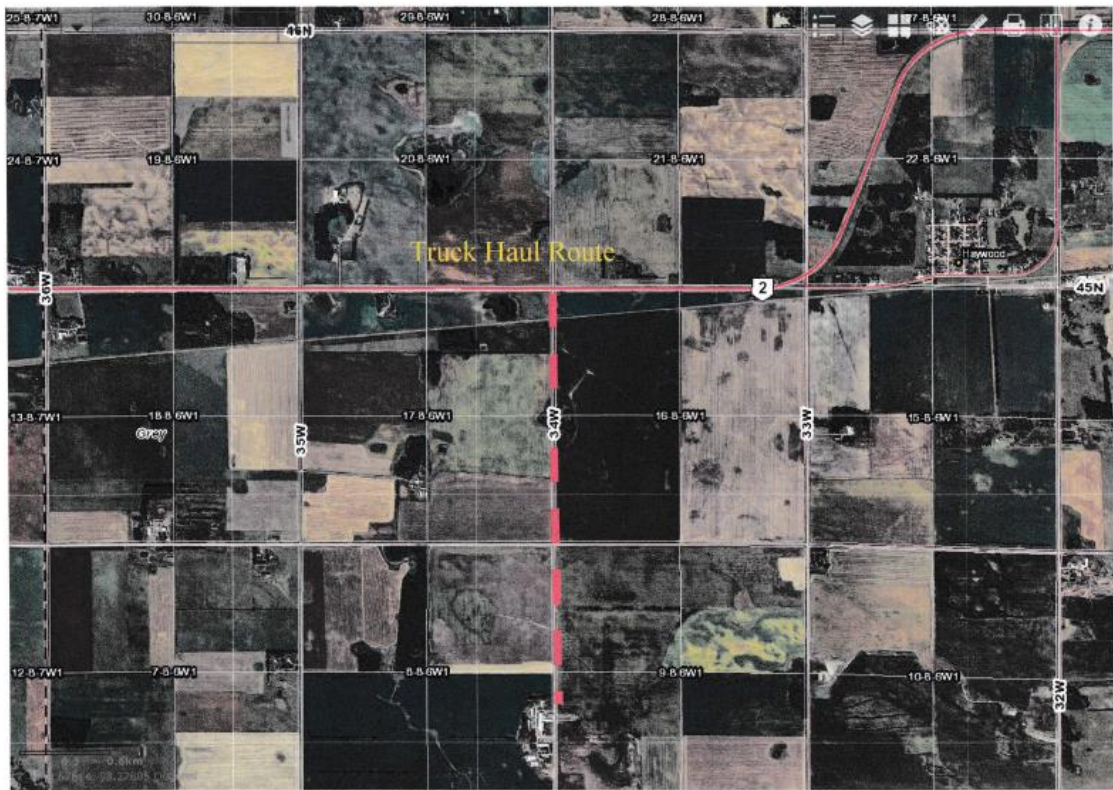


Proposal: To expand a current dairy operation from 300 animals (600 AU) to 535 animals (1070 AU) (animal confinement facility)

This will involve the following:

- Construction of a new heifer facility in 2017
- Expansion from 250 milk cows to 450 milk cows plus 85 dry cows proposed for 2018
- Dairy heifers to be housed in new heifer barn and dry cows and calves to be housed in existing facilities
- Expansion of Circular Steel tank (manure storage structure) by one ring when number of dairy cows is expanded in 2018
- Consuming 15,300 imperial gallons of water maximum per day (from a public pipeline)
- Composting mortalities

- Using the truck haul routes as shown below



C. SITE ASSESSMENT OVERVIEW

Assessment Overview Table

Provincial Technical Overview of: Divorner 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 Animal Confinement Facility	X	Increasing the number of livestock from 600 A.U. to 1070 A.U. A new heifer facility will be constructed in 2017 and a further expansion from 250 milk cows to 450 milk cows plus 85 dry cows is proposed for 2018. Dairy heifers will be housed in the new heifer barn and dry cows and calves will be housed in the existing facilities.	MR
3. Proposed Project Site Physical Suitability	X	This proposal is for the expansion of an existing operation.	AG
4. Proposed Project Site Flood Risk Potential	X	MI – Water Management, Planning and Standards Branch are not aware of any major overland flooding at this location, nor do we have Provincial Waterways in the vicinity.	MI
5. Identified 20,488 Imp/gal/day required for proposed operation	X	As this project intends to use water from a public pipeline which is already licensed under The Water Rights Act, the Water Use Licensing Section has no concerns.	SD
6. Proposed measures to meet storage and application	X	Any applicable annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. The site assessment indicates	SD

Provincial Technical Overview of: Divorne Farms Ltd.

Items Provided by Project Proponent	Con- firmed	Related Existing Provincial Safeguards	Dept
regulations for manure		<p>that a manure storage facility will be expanded and that annual manure management plans are required. Therefore, the Branch will receive and review additional information associated with application of manure at a later date.</p> <p>Details on requirements for permits for construction/expansion/modification of manure storage facilities and confined livestock areas as well as annual manure management plans are available at www.gov.mb.ca/sd/envprograms/livestock.</p>	
7. Proposed Project Site with suitable mortalities disposal methods	X	<p>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 Sustainable Development.</p>	SD
8. Proposed Project Site with acceptable odour control measures	X	<p>Divorne Farms Ltd has indicated that the straw bedding used in the operation will form a crust on the liquid manure which will reduce odours from the manure storage facility. Injection and incorporation of manure will also reduce odours from land application of manure.</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>	Ag

Provincial Technical Overview of: Divorner 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	The site is appropriately designated "A" Agriculture in the Grey-St. Claude Development Plan 2/99 and is zoned "AG" Agricultural General zone in the R.M. of Grey Zoning By-Law No. 5/03. A Conditional Use Order is required for Livestock Operations in excess of 300 A.U. The site exceeds the 1,739 foot setback from the community of Haywood.	MR
10. Proposed Project Site that is a sufficient distance from native prairie, Wildlife Managements Areas and Crown Land.	X	No wildlife related concerns. Land Management & Planning Section has reviewed the available information and has no concerns as no Crown lands will be impacted by the proposal.	SD
11. Proposed Spreadfields that are sufficient, and suitable for manure spreading	X	<p>In order to determine the land requirement for Divorner Farms Ltd., nitrogen and phosphorus excretion by all of the livestock is compared to nitrogen utilization and phosphorus removal by the crops to be grown. The calculation takes into consideration typical, modern feeding practices for livestock production and realistic, long-term 10-year crop yields from the Manitoba Agricultural Services Corporation (MASC) for the RM of Grey.</p> <p>In the RM of Grey, 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, Divorner Farms Ltd. is required to demonstrate that they have access to at least 1194 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 lands with 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 3 to 5. The limitations include moisture deficit (M) and Wetness (W). Divorner Farms Ltd. has indicated that Class 6 will be removed from manure application.</p> <p>Divorner Farms Ltd. has demonstrated that they have access to 2258 suitable acres for manure application. This greatly exceeds the current land requirement.</p>	Ag

Provincial Technical Overview of: Divorne Farms Ltd.

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
12. Proposed Spreadfields with sufficient minimum setbacks on Spreadfields from natural features (water sources etc.)	X	<ul style="list-style-type: none"> • The proponent has acknowledged that the setback areas for all water features have been observed and excluded from land base calculations for this operation. It is important that these setbacks be clearly communicated and observed by everyone involved in manure application so as to minimize the risk of nutrients entering surface waters. • 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/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 http://www.gov.mb.ca/conservation/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. • 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 area. 	SD
14. Proposed Spreadfields that have been secured by spread agreements	X	Divorne Farms Ltd. has met the land requirement with lands that are owned by Divorne Farms Ltd. No land agreements are required.	Ag
15. Proposed Spreadfields that meet development plan and zoning by-law requirements	X	All identified spread fields are compliant with their respective designations and zones. All spreadfields are designated "A" Agriculture in the Grey-St. Claude Development Plan No. 2/99 and all are zoned "AG" Agricultural General zone in the R.M. of Grey Zoning By-Law No. 5/03.	MR

Provincial Technical Overview of: Divorner Farms Ltd.

Items Provided by Project Proponent	Confirmed	Related Existing Provincial Safeguards	Dept
16. Proposed trucking routes and access points that do not impact Provincial Roads or Provincial Trunk Highways	X	<p>A municipal road will service this livestock expansion.</p> <p>PTH 2 is the proposed truck haul route. The existing municipal road connects onto PTH 2 with minimal increase in usage.</p> <p>We have no concerns with this proposal. Please note that any structures placed within the controlled area of PTH 2 (125 feet from the edge of the right-of-way) requires a permit from the Highway Traffic Board. Please phone (204) 945-8912 for information regarding any such permits. The placements of temporary drag lines or any other temporary machinery/equipment for manure application within the right-of-way of PTH 2 required 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 draglines or other temporary equipment for manure application within the controlled area of PTH 2 (125 feet from the edge of the right-of-way).</p>	MI
17. Proposed trucking routes – local roads	X	Divorner Road and PTH 2 are the proposed trucking routes	MR
18. Declared Provincial Waterways	X	No Provincial Waterways in the vicinity	MI

Provincial Departments

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

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. 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.

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

Appendix
LIVESTOCK TECHNICAL REVIEW COMMITTEE

SUMMARY OF COMMENTS/RECOMMENDATIONS – Manitoba Sustainable Development

PROPONENT: Bruno Divorne
PROPOSAL NAME: Divorne Farms Ltd.
TYPE OF OPERATION: 450 head dairy and associated livestock
RURAL MUNICIPALITY: Grey
OPERATION LOCATION: SE 8-8-6 WPM

Environmental Stewardship Division; Environmental Approvals Branch

- Any applicable permit or annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. Any applicable annual submissions under the Livestock Manure and Mortalities Management Regulation would be processed by Environmental Approvals Branch of Sustainable Development. Therefore, the Branch will receive and review additional information associated with application of manure at a later date.
- Details on requirements for permits for construction/expansion/modification of manure storage facilities and confined livestock areas as well as annual manure management plans are available at www.gov.mb.ca/sd/envprograms/livestock
- The proponent indicated that 20,488 Imp gal per day maximum would be used.
- 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 Sustainable Development.

Environmental Stewardship Division; Environmental Compliance & Enforcement Branch

- Environmental Compliance and Enforcement, Portage la Prairie Office, has reviewed the proposal identified as Divorne Farms Ltd, SE-8-8-6W, RM of GREY Expansion of Livestock Operation. Our file on this operation has not raised concerns regarding this operation. We have no comments on the proposed expansion.

Biodiversity & Land Use Division; Wildlife & Fisheries Branch; Habitat, Biodiversity & Endangered Species section

- No wildlife related concerns.

Parks and Regional Services Division

- No concerns.

Water Stewardship Division; Water Science & Management Branch

Staff in the Water Science and Watershed Management Branch have reviewed the site assessment for Divorne Farms Ltd. and have the following comments:

- The maps on page 34 and 37 seem to indicate that manure will be applied to a 10 acre parcel of 6W (Nutrient Management Zone N4) soil on the East half of 16-8-6W1 however, on page 43

"Manure application field characteristics table" it clearly indicates that the 10 ac 6W polygon has been excluded from the manure application land base calculation. The maps should be revised to match the table so as to reduce confusion and insure that manure is not applied to this 10 acre parcel.

- Proper nutrient management applications that avoid excess loss of nutrients to surface waters are needed on lands receiving nutrients including 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 cattle manure to alfalfa/perennial forage but indicates the application method is either injection or broadcast incorporated. Neither would be appropriate for a perennial forage - this needs to be clarified. If manure is applied by surface broadcast without 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. Surface manure applications are best completed by mid-October or earlier as manure applied shortly before freeze up and remaining on the soil surface is more susceptible to nutrient runoff losses during spring snowmelt than if the manure is applied earlier in the fall or during the summer (for example between cuts of alfalfa).
- 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.
- The proponent has acknowledged that the setback areas for all water features have been observed and excluded from land base calculations for this operation. It is important that these setbacks be clearly communicated and observed by everyone involved in manure application so as to minimize the risk of nutrients entering surface waters.
- 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. 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. 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. The proponent has identified sufficient land (2258 acres have been identified 1875 acres would be needed for a 1x crop P removal rate). It is also important to rotate manure application across all spread fields so as to prevent excessive P buildup in any one field.
- 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/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 http://www.gov.mb.ca/conservation/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.
- 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 area.

Water Stewardship Division; Water Use Licensing Branch

- As this project intends to use water from a public pipeline which is already licensed under The Water Rights Act, the Water Use Licensing Section has no concerns.

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

- Land Management & Planning Section has reviewed the available information and has no concerns as no Crown lands will be impacted by the proposal.

COMMENTS COMPILIED BY:

Jen Webb, Manager

Environmental Approvals Branch

Environmental Stewardship Division

Manitoba Sustainable Development

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