

SITE ASSESSMENT - Footnotes

FOR LARGE LIVESTOCK OPERATION PROPOSALS

(300 ANIMAL UNITS OR MORE) THAT REQUIRE CONDITIONAL USE APPROVAL

Section 1.0 – Description of Livestock Operation

1. Identifying the location of the project is required to determine compliance with zoning and other by-laws. The inclusion of the Location Map helps to identify the project site within the municipality.

Section 1.1 – Nature of the Project

2. Indicating if the operation is new or expanding helps to determine which regulatory requirements must be met.

Section 1.2 – Project Site Plan

3. The site plan should show animal confinement facilities and confined livestock areas, nearby dwellings, neighbouring designated residential areas, any shelterbelts, wells or water source locations, access points to the property and property dimensions. The site plan will enable the applicant to demonstrate that the separation distances meet provincial regulations. The site plan may also assist the applicant in determining appropriate setbacks for manure management.

All landowners within a 3-kilometer radius of the project site will be notified of the public Conditional Use Public Hearing that will take place as part of the review process.

Section 2.0 - Current and Proposed Type and Size of Operation

4. The regulatory requirements, such as municipal by-laws and provincial regulations, vary with the size of livestock operation.

Section 3.0 – Animal Confinement Facilities

5. Animal Confinement Facility – means a barn or an outdoor area where livestock are confined by fences or other structures and includes seasonal feeding areas but not feedlots or grazing areas.

Agricultural buildings, including barns that are over 600 sq. meters (6,458 sq. ft.), require a building permit from the Office of the Fire Commission under The Buildings Act and the Manitoba Building Code.

Section 4.0 – Confined Livestock Areas

6. The [Livestock Manure and Mortalities Management Regulation \(42/98\)](#) defines a confined livestock area as an outdoor, non-grazing area where livestock are confined by fences or other structures, and includes a feedlot, paddock, corral, exercise yard, holding area, as well as a covered structure used to confined livestock that has one or more sides without a wall that exposes the interior of the structure to the elements, but does not include a seasonal feeding area.

Confined livestock areas most commonly refer to outdoor, open livestock facilities such as beef feedlots or cow-calf operation facilities (“open confined livestock areas”). The [Livestock Manure Mortalities and Management Regulation \(42/98\)](#) also includes covered structures, open to the elements, used for the rearing of livestock that feature a floor design that constitutes an effective water barrier, such as concrete (“covered confined livestock areas”) in the definition of Confined Livestock Area. For example, biotech shelters for feeder pig production and hoop structures.

According to Section 16(2) of the Livestock Manure and Mortalities Management Regulation (*M.R. 42/98*), a permit is required from Manitoba Environment and Climate Change for the construction, modification or expansion of a confined livestock area capable of housing 300 Animal Units or more.

When the confined livestock area does not require a permit, the confined livestock area must be operated in a manner that does not cause pollution to surface water, surface watercourse, groundwater, or soil according to section 16(5) of the LMMMR.

Section 5.0 – Project Sites Unsuitable for Development

7. According to Section 14(1) of the [Nutrient Management Regulation \(M.R. 62/2008\)](#) under The Water Protection Act, no person shall construct, install, site, locate, expand or modify a confined livestock area or manure storage facility in Nutrient Management Zone N4 or in a Nutrient Buffer Zone.
8. Nutrient Management Zone N4 includes soils with Agriculture Capability Class 6 or 7 and unimproved organic soils.

Agricultural Capability class(es), including their limitations, of the soils for the project site can be determined by downloading files for GIS software from <https://geoportal.gov.mb.ca/datasets/soil-survey-manitoba/explore>. The soil information can also be viewed and used to generate maps in ArcGIS online by clicking the “I want to use this” link at the bottom left of the soil data page.

Alternatively, Manitoba Agriculture web portal [Agri-Maps](#) and [Agri-Maps: Soil Viewer](#) can be used to view soil survey information but it does not currently include the most recent detailed soil surveys (includes all surveys up until D94-De Salaberry (2020)). The full list of completed detailed soil surveys can be found at <https://www.gov.mb.ca/agriculture/soil/soil-survey/importance-of-soil-survey-mb.html#detailed>.

9. The Nutrient Buffer Zone consists of the following land:
 - (a) within 15 metres of the edge of a groundwater feature, or within 20 metres of it if that area is not covered by permanent vegetation;
 - (b) within a roadside ditch or an Order 1 or 2 drain;
 - (c) between the water's edge and the high water mark of a wetland, bog, marsh or swamp other than a major wetland, bog, marsh or swamp;

- (d) adjacent to a water body listed in the following table, having a width from the water's edge to a point that is the distance set out in column A or B, as the case may be, from the
 (i) water body's high water mark, or
 (ii) top of the outermost bank on that side of the water body, whichever is further from the water.

Water Body	A	B
A lake or reservoir designated as vulnerable	30 m	35 m
A lake or reservoir (not including a constructed storm water retention pond) not designated as vulnerable	15 m	20 m
A river, creek, or stream designated as vulnerable		
A river, creek, or stream not designated as vulnerable		
An Order 3, 4, 5, or 6 drain	3 m	8 m
A major wetland, bog, marsh, or swamp		
A constructed storm water retention pond		

Use Column A if the application area is covered with permanent vegetation. Otherwise, use Column B.

Source: Section 3(3) of the [Nutrient Management Regulation \(M.R. 62/2008\)](#)

Section 6.1 – Access to Surface Water

10. According to Section 16(1) of the [Livestock Manure Mortalities and Management Regulation \(42/98\)](#) the operator must ensure livestock in a confined livestock area do not have access to surface water. According to Section 16.5(1) of the [Livestock Manure Mortalities and Management Regulation \(42/98\)](#) the operator must ensure livestock in a seasonal feeding area do not have access to surface water.

Surface water is defined as any body of flowing or standing water, whether naturally or artificially created, including, but not limited to, a lake, river, creek, spring, drainage ditch, roadside ditch, reservoir, swamp, wetland and marsh, including ice on any of them, but not including a dugout or reservoir on the property of an agricultural operation.

Section 6.2 – Water Requirements

11. The Manitoba Government regulates the use of surface and ground water. Identifying the source of water is required for resource management and licensing purposes. All operations using more than 25,000 litres (5,499 imp gal) per day must maintain a Water Rights Licence under The Water Rights Act, [Water Rights Regulation \(M.R. 126/87\)](#).

Section 7.0 Development Plan

12. The Development Plan and Zoning By-law adopted under [The Planning Act](#) set policy and provisions for the use and development of land. A proposed livestock operation must comply with the requirements of both documents.

Every Development Plan must contain a livestock operation policy (LOP) that identifies areas where new or expanded livestock operations may be allowed. It must also set policy for the location and setback of livestock operations. Identifying the Development Plan's land use designation and policies (for the planning district or municipality that affect the site) will help confirm the project site's compliance. The Development Plan designations for the spread fields (if something other than agricultural) will anticipate the potential loss of the fields in the future due to development.

Section 8.0 - Zoning By-Law

13. Identifying the zoning for the project site, the proposed spread fields and the related zoning provisions, helps determine the project's compliance and the minimum separation distances needed between the operation and property boundaries and other natural features and land uses. The Zoning By-law contains specific provisions that govern location and separation distances of livestock operations.

If any project front, side or rear yard site setbacks are less than the Zoning By-law minimum, a Variance Order from the municipality will be required.

Section 9.0 - Separation Distances (zoning by-law)

14. Identifying the distance to the nearest land use features such as a rural residences (not related to the livestock operation) and non-agricultural designated uses (such as residential or recreational designated areas in the Development Plan), enable the applicant to ensure that minimum separation distances and setbacks are maintained between those various uses and the proposed animal confinement facility and manure storage facilities.

Section 10.0 – Wells

15. Unsealed, abandoned wells on project site and spread fields must be accounted for to ensure that required setbacks from manure and mortalities composting sites can be maintained, as per the [Livestock Manure Mortalities and Management Regulation \(42/98\)](#). When preparing the site assessment for a proposed operation, applicants must provide Groundwater Management (groundwater@gov.mb.ca) with legal descriptions of project site and spread field locations. Groundwater Management will respond with a Wells Table listing wells on the properties as identified in the provincial wells database. In the Wells Table, the applicant must provide:
 - the location and status of any additional known wells not identified by Groundwater Management, using the additional rows; and
 - additional information pertaining to the wells identified by Groundwater Management, using Column G.

An abandoned well means a well or test hole not in present use and not maintained for future use. All abandoned wells must be properly sealed. Information on sealing wells and blank sealed well reports are available [here](#). Wells must be sealed in accordance with the [Well Standards Regulation](#).

Section 11.0 – Water Control Works

16. The applicant is required to have a valid water control works licence (or registration certificate) to control water or construct, establish or maintain any water control works. Water control works are defined as any dyke, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert, borehole or contrivance for carrying or conducting water, that temporarily or permanently alters, or may, alter the flow or level of water, water in a water body, by any means, including drainage or changes, or may change the location or direction of flow of water by any means including drainage.

Class 1 and 2 wetlands are eligible for drainage. Authorization of the proposed water control works can follow the registration process (assuming all other requirements are met).

Class 3 (seasonal) wetlands are eligible for drainage through authorization by licence. Any proposed loss of wetland benefits must be offset by compensation for lost acres of wetlands as required by The Water Rights Act and the [Water Rights Regulation](#). A water control works licence will not be issued for the drainage or filling of Class 4 (semi-permanent), and 5 (permanent) wetlands.

For additional information, or to apply for an authorization, please follow the link below: [Environment and Climate | Province of Manitoba \(gov.mb.ca\)](#)

Section 12.0 – Manure Type and Storage

17. The [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98) sets requirements for the use, management and storage of livestock manure in agricultural operations, to ensure it is handled in an environmentally sound manner.

For more information, call Manitoba Environment and Climate Change at (204) 945-8321 in Winnipeg.

Section 12.2 - Manure Storage Type and Construction

18. According to Section 6(1) of the [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98), no person shall construct, modify or expand a manure storage facility except under the authority of a permit issued by Manitoba Sustainable Development.

For more information on obtaining a manure storage facility permit, contact Manitoba Environment and Climate Change at (204) 945-8321.

Section 13.0 – Mortalities Disposal

19. The [Livestock Manure and Mortalities Management Regulation](#) (M.R. 42/98) establishes requirements for the storage and disposal of livestock mortalities.

20. A permit to construct permanent site for composting mortalities is required if the composting of mortalities utilizes a substantial amount of manure (>15% by weight) as a primary substrate.

Winter application of composted mortalities is prohibited between November 10 of one year and April 10 of the following inclusive.

Contact Manitoba Environment and Climate Change at (204) 945-8321 for more information.

Section 14.0 – Setback Distances from Manure and/or Mortality Sites to Water and Operation Boundaries

21. Setback distances required under the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#).

For more information contact: [Manitoba Environment and Climate Change](#) TRC member.

Section 15.0 – Building in Flood Areas

22. According to Section 5(1) of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#), an operator is prohibited from locating a manure storage facility within the boundaries of the 100-year flood plain unless the facility is provided with flood protection that is at least 0.6 meters higher than the 100-year flood water level or the director is satisfied that the facility has adequate flood protection.

The [Designated Flood Area Regulation](#) under The Water Resources Administration Act requires a Designated Flood Area Permit before a proposed structure (such as a barn) can be built within a Designated Flood Area

The flood protection level for structures located within a Designated Flood Area is the site-specific design flood level plus freeboard, as provided by the Hydraulic Forecasting Branch of Manitoba Infrastructure. Contact the Hydrologic Forecasting Branch at (204) 945-2121 in Winnipeg; 1-800-214-6497 toll free, for more information.

Note: At the time of permit issuance, verification is needed to ensure any proposed structure(s) are located within the 100-year flood plain elevation; or at an elevation set by Manitoba Infrastructure.

Section 17.0 – Land Available for Manure Application

23. Manure that is land applied must be used as a fertilizer for crop production. According to Section 13(1) of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#), operations that are 300 AU or more that land apply manure must register a manure management plan with Manitoba Environment and Climate Change.

According to Section 6(4) of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#) an applicant is entitled to be issued a manure storage facility permit if the Director is satisfied that sufficient suitable land is available to the operator to issue an appropriate manure management plan.

According to Section 16.1 (3) of the [Livestock Manure and Mortalities Management Regulation](#)

(M.R. 42/98) an applicant is entitled to be issued a permit to construct, modify or expand a confined livestock area if the Director is satisfied that sufficient suitable land is available to the operator to issue an appropriate manure management plan.

Section 17.1 – Land Calculation

24. The Manitoba Agriculture Land Calculator estimates long-term land base requirements for manure application based on the quantity of nitrogen and phosphorus excreted by livestock and the utilization or removal of these nutrients by the proposed crops.

The quantity of nitrogen and phosphorus excreted by the livestock depends on the type, number and size of livestock, the quantity and availability of nitrogen and phosphorus fed to the livestock, the amount retained by the livestock (in weight gain) and/or the amount contained in milk and eggs.

25. The “Acres for Nitrogen” and “Acres for Phosphorus” generated by the land calculator are estimated based on the following Provincial Policy:

For lands outside of Hanover and La Broquerie, it is currently the Government of Manitoba’s policy to calculate the land base using estimates for crop nitrogen utilization and *twice* the crop phosphorus removal over the course of a rotation. In these areas, it is assumed that additional land can be brought into the manure management plan in the future, if necessary.

According to Section 12.2(1) of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#), in areas where the livestock produce greater than two times the annual crop removal rate of P₂O₅, the operator must demonstrate access to additional lands suitable for the application of manure or submit to Environment and Climate Change a plan to maintain soils below 60 ppm Olsen P. Based on this, for lands in Hanover and La Broquerie, it is currently the Government of Manitoba’s policy to calculate the land base by balancing all of the available manure nitrogen and phosphorus with crop nitrogen utilization and phosphorus removal over the course of a rotation.

When a proposal contains lands within Hanover and/or La Broquerie as well as lands outside of Hanover and La Broquerie, crop phosphorus removal over the course of a rotation is applied to the lands within Hanover and La Broquerie (balance) and twice the crop phosphorus is applied to the lands outside of Hanover and La Broquerie, as described above.

26. The utilization of nitrogen and removal of phosphorus by crops depends on the crops grown and the historical crop yield averages. Long-term MASC yield averages must be used for the land calculation. Ten-year MASC yield averages should be used unless otherwise recommended by an agronomist that is a member in good standing with the Manitoba Institute of Agrologists or a Certified Crop Advisor.

Section 17.2 - Long-Term Environmental Sustainability

27. The “Acres for Phosphorus Balance” in the land calculator are an estimate of the land that could be needed over the long-term to balance all of the manure phosphorus with crop phosphorus removal over the course of a rotation, regardless of land location.

Section 17.3 - Characteristics of Manure Application Fields

28. Land is assessed based on agriculture capability, soil test levels for Olsen phosphorus and compliance with regulatory setbacks from water. Manure application fields can be owned, leased, under agreement or agricultural crown lands.

Agriculture Capability:

According to Section 12(1) of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#), application of nutrients is only permitted on soils with Agriculture Capability Class 1 to 5. Manure application is not permitted on Agriculture Capability Class 6, 7 and unimproved organic soils.

Agricultural Capability class(es), including their limitations, of the soils for the project site can be determined by accessing shape files for GIS software through the [Manitoba Land Initiative \(MLI\)](#) website. In addition, there are files that can be downloaded and viewed on Google Earth. Click [here](#) to download instructions under the MLI website.

Alternatively, Manitoba Agriculture web portal [Agri-Maps](#) and [Agri-Maps: Soil Viewer](#) can be used to view publicly available soil survey information.

Soil Tests:

Only fields with less than 60 parts per million (ppm) Olsen phosphorus (P) in the top six inches (15 centimeters) of soil are eligible.

Section 18.0 – Setbacks for Manure Application

29. Manure Application Setback^a Requirements from Water Features

Water feature ^b	Application Method	Setback with vegetative cover	Setback with bare soil
Vulnerable lake or reservoir	Any method	30 m	35 m
All other lakes and reservoirs	Broadcast without incorporation	30 m (if 15 m permanently vegetated)	35 m (if less than 15 m permanently vegetated)
	Injection or broadcast with immediate incorporation	15 m	20 m
Groundwater feature	Any method	15 m	20 m
Vulnerable rivers, creeks and streams	Any method	15 m	20 m
All other rivers, creeks and streams and unbermed Order 3, 4, 5 or 6 drains	Broadcast without incorporation	10 m (if 3 m permanently vegetated)	15 m (if less than 3 m permanently vegetated)
	Injection or broadcast with immediate incorporation	3 m	8 m
Bermed Order 3, 4, 5 or 6 drains ^c	Any method	3 m	8 m

Major wetland, bog, marsh or swamp	Any method	3 m	8 m
All other wetlands, bogs, marshes and swamps	Any method	Area between water's edge and the high water mark	Area between water's edge and the high water mark
Roadside ditch or Order 1 or 2 drain (excluding in-field ephemeral drains)	Any method	All land within the ditch or drain	All land within the ditch or drain
sources: LMMMR and NMR			

^aSetback measured from the water body's high water mark or the top of the outermost bank on that side of the waterbody, whichever is further from the water. "High water mark" means a point on land that would be at the water's edge when the water reaches the following level:

- in the case of a reservoir, the full supply level;
- in the case of a drain, the bank-full level;
- in the case of any other water body, the highest level to which the water usually rises each year and at which it remains long enough to change the characteristics of the land or the vegetation on the land.

^bWater features are defined in the [Nutrient Management Regulation \(M.R. 62/2008\)](#) as follows:

- **"groundwater feature"** means a sinkhole, a spring or a well other than a monitoring well.
- A wetland, bog, marsh or swamp is major if
 - it has an area greater than 2 ha (4.94 acres);
 - it is connected to one or more downstream water bodies or groundwater features; and
 - it contains standing water or saturated soils for periods of time sufficient to support the development of hydrophytic vegetation

^cFor bermed drains the setback distance is measured from the top of the berm on the drain side of the berm (i.e. the top of the berm is considered part of the setback).

Section 19.0 – Manure Transportation and Application

30. According to the [Manure Regulation \(M.R. 124/2007\)](#) under The Pesticides and Fertilizers Control Act, commercial manure applicators must be trained and licenced in Manitoba. The training is delivered by the Assiniboine Community College and licencing is through Manitoba Agriculture.

According to Section 14(1) of the Livestock Manure and Mortalities Management Regulation (M.R. 42/98), no person shall apply livestock manure to land between November 10 of one year and April 10 of the following year.

Section 20.0 - Manure Application on Lands Subject to Frequent Flooding or Inundation

31. According to Section 14.2 of the [Livestock Manure and Mortalities Management Regulation \(M.R. 42/98\)](#), manure that is applied in the fall (September 10 – November 10) to tilled lands in the [Red River Valley Special Management Area \(RRVSMA\)](#) and regularly inundated areas must be injected or incorporated within 48 hours.

Section 21.0 – Projected Truck Haul Routes and Access Points

32. The potential impact on existing public roads (municipal and provincial), access and the need for improvements or mitigation requires consideration. Identifying truck haul routes and access points on municipal and Provincial Roads and/or Provincial Trunk Highways assists the province and municipality in planning and identifies any potential required access permits. The information also allows other stakeholders to determine potential impacts on existing roads and adjacent land uses.
- 33.