NUTRIENT MANAGEMENT REGULATION

Nutrient Management Plan – Spreading Livestock Manure or Livestock Operations less than 300 Animal Units

Agricultural operations in Manitoba applying nutrients such as livestock manure may be required to register a Nutrient Management Plan to Manitoba Agriculture and Resource Development. The plan must be submitted by July 10th for fertilization programs beginning in the fall, or by February 10th for fertilization programs beginning in the spring.

Section A – Operation Information

Name of Operation _____

Mailing Address _____

_____ Postal Code _____

Legal Land Description _____

Qtr. Sec. Twp. Rge. E/WPM; River Lot/Parish

_____ Latitude: _____ Longitude: _____

Rural Municipality GPS Coordinates in Decimal Degrees (if available)

Name of Contact _____

Contact Numbers

_____

Business **Residence** **Cellular** **Facsimile**

Email Address _____

Owner (legal name) _____ _____

Corp. File # if applicable

Mailing Address _____

_____ **Postal Code** _____

Contact Numbers

_____

Business **Residence** **Cellular** **Facsimile**

Email Address _____

Affiliate (legal name) _____

Did your operation exist prior to November 8, 2006? Yes ☐ No ☐

If this Nutrient Management Plan is a requirement of a Director's Order or an Water Protection Officer Order, please indicate Order number: _____

FOR DEPARTMENT USE ONLY

Received by: _____ Date Received: _____

Follow-up required Yes ☐ No ☐

Nature of follow-up _____

Proprietary (confidential) information will be protected in accordance with Manitoba law.
Personal information is collected under the authority of *The Water Protection Act*, the Nutrient Management Regulation, and will be used to issue receipts, for surveys, administration and enforcement purposes. Information collected is protected by the privacy provisions of *The Freedom of Information and Protection of Privacy Act.* If you have any questions, contact the FIPPA Analyst, Agriculture and Resource Development, 360-1395 Ellice Avenue, Winnipeg, Manitoba, Canada, R3G 3P2, (204)945-4823.

Please complete this form (all sections) and forward to:
Water Quality Management Section, Manitoba Agriculture and Resource Development, 200 Saulteaux Cr (box 14), Winnipeg MB, R3J 3W3; Fax: (204) 948-2357 Email: nmr@gov.mb.ca
Questions, call: (204) 914-1701

Section B – Animal Unit[1] (A.U.) Inventory

Type of livestock	Number of livestock of each type	x	A.U. produced by one livestock	A.U for each livestock type
Dairy				
Milking Cows inc. associated livestock (640-900 kg) – mature/lactating/dry OR	_____	x	2.000	_____
Veal calves (70-140 kg)	_____	x	0.130	_____
Calves (100-135 kg)	_____	x	0.300	_____
Replacement heifers (400-450 kg)	_____	x	1.000	_____
Cows or bulls (500-600 kg)	_____	x	1.300	_____
Beef				
Beef Cows[2], inc. associated livestock OR	_____	x	1.250	_____
Backgrounder[3]	_____	x	0.500	_____
Summer pasture/replacement heifers[4]	_____	x	0.625	_____
Feedlot cattle[3]	_____	x	0.769	_____
Hogs				
Sows, farrow to finish (110-115 kg)	_____	x	1.250	_____
Sows, farrow to weanling (5 kg)	_____	x	0.250	_____
Sows, farrow to nursery (23 kg)	_____	x	0.313	_____
Weanlings (5-23 kg)	_____	x	0.033	_____
Grower/finishers (23-113 kg)	_____	x	0.143	_____
Boars (artificial insemination operations)	_____	x	0.200	_____
Chickens				
Broilers	_____	x	0.0050	_____
Roasters	_____	x	0.0100	_____
Layers	_____	x	0.0083	_____
Pullets	_____	x	0.0033	_____
Broiler Breeder Pullets	_____	x	0.0033	_____
Broiler Breeder Hens	_____	x	0.0100	_____
Turkeys				
Broilers	_____	x	0.010	_____
Heavy Toms	_____	x	0.020	_____
Heavy Hens	_____	x	0.010	_____
Horses (PMU)				
Mares, including associated livestock	_____	x	1.333	_____
Sheep				
Ewes, including associated livestock	_____	x	0.200	_____
Feeder lambs	_____	x	0.063	_____
TOTAL ANIMAL UNITS				_____

Other livestock or operation type - please inquire with your Manitoba Agriculture and Resource Development agricultural engineer or livestock specialist

[1] One animal unit is defined as the number of livestock required to excrete 73 kg (160 lb) of nitrogen in a 12 month period; please refer to the *Farm Practices Guidelines for Beef/Dairy/Hog/Poultry Producers in Manitoba* for more information.
[2] Do not include calves or replacement heifers; *e.g.* for 100 cow calf pairs with 30 replacement heifers, simply enter 100.
[3] Cattle on finishing rations intended for slaughter.
[4] Weaned calves; do not include cow numbers.

NOTE: **If your animal inventories have INCREASED since last submission, please indicate below:**

Type of livestock	Number of livestock of each type	x	A.U. produced by one livestock	A.U for each livestock type
		x		
		x		

Section C – Volume To Be Land Applied

VOLUME OF LIVESTOCK MANURE TO BE LAND APPLIED (INCLUDE UNITS)

_____

Section D – Fertilizer And Manure Storage Facilities

Are nutrients such as synthetic fertilizers or livestock manures being stored for a period beyond a single cropping season?

Yes □ **No** □

Section E – Nutrient Buffer Zones

SECTION 3(3) OF THE NUTRIENT MANAGEMENT REGULATION UNDER *THE WATER PROTECTION ACT* STATES THAT 'THE NUTRIENT BUFFER ZONE' CONSISTS OF THE FOLLOWING:

Water Body	Setback if applicable area IS covered with permanent vegetation	Setback if applicable area IS NOT covered with permanent vegetation
• a roadside ditch or an Order 1 or 2 drain†	No direct application to ditches and Order 1 and 2 drains	
• a groundwater feature	15 m (49 feet)	20 m (66 feet)
• a wetland, bog, marsh or swamp other than a major wetland, bog, marsh or swamp‡	Distance between the water's edge and the high water mark	
• a lake or reservoir designated as vulnerable**	30 m (98 feet)	35 m (115 feet)
• a lake or reservoir (not including a constructed stormwater retention pond) not designated as vulnerable** • a river, creek or stream designated as vulnerable**	15 m (49 feet)	20 m (66 feet)
• a river, creek or stream not designated as vulnerable** • an Order 3 or higher drain† • a major wetland, bog, marsh or swamp‡ • a constructed stormwater retention pond	3 m (10 feet)	8 m (26 feet)

ARE THE ABOVE SETBACKS BEING ADHERED TO?

☐ **Yes** ☐ **No**

* The Nutrient Buffer Zone is measured out from the water body's high water mark or the top of the outermost bank on that side of the water body, whichever is further from the water.

† Designated on a Government of Manitoba plan that shows the designation of drains.

‡ As defined in section 1(2) in the Nutrient Management Regulation under the *Water Protection Act.*
"For the purposes of this regulation, a wetland, bog, marsh or swamp is major if
(a) it has an area greater than 2 ha (4.94 acres)
(b) it is connected to one or more downstream water bodies or groundwater features; and
(c) it contains standing water or saturated soils for periods of time sufficient to support the development of hydrophytic vegetation."

** Designated as vulnerable if listed in the Schedule in the Nutrient Management Regulation under *The Water Protection Act.*

Drain order maps may be accessed in Google Earth (kmz) format via the MLI website under "Soil Classification" - "SoilAID" or as shapefiles under "Hydrography" at the following link: https://mli2.gov.mb.ca// (Registration for the site is required but it is free). PDF maps can be accessed at: https://www.gov.mb.ca/sd/waste_management/livestock_program/livestockmap.html .

Individuals who are unable to access the maps online and wishing a copy of a drain order map, may call 204-801-8368.

Section F – Field Information

Legal Land Description						
GPS Coordinates (4 corners of the field) Coordinates in decimal degrees (if available)						
Field Size (provide units)						
Agriculture capability* (CLI class and limitation (subclass))						
Nitrate-N (include units) 0-24" (60 cm) depth (Include soil test report)						
Olsen P (include units) 0-6" (15 cm) depth (Include soil test report)						
Date(s) of Anticipated Nutrient Application(s)						
Irrigated (Indicate by entering 'Yes' or 'No')						

*List the agriculture capability class and subclass as determined by published Manitoba Soil Survey report or electronic data distributed in both Google Earth format (kmz) and as shapefiles (for GIS software) distributed by the Manitoba Land Initiative at: http://mli2.gov.mb.ca

Photocopy additional pages as required.

Section G - Certification of Nutrient Management Plan

Note: The plan must be certified or it is VOID. Mark the appropriate box.

I certify that the information contained in this plan is true and that no relevant information has been withheld.

Date _____ _____

Signature of Operator

Crop years referenced under Nutrient Management Plan (specify years): _____

Plan Prepared by: ☐ Operator ☐ Other

If other than operator:

I certify that the information contained in this plan is true and that no relevant information has been withheld.

Date _____ _____

Signature of person preparing plan on behalf of operator

Address and phone number of person preparing plan: _____

Manitoba Institute of Agrologists #[1]/Certified Crop Adviser # _____

[1]if exempt from registration to Manitoba Institute of Agrologists as per Section 23 of M.R. 62/2008 enter 0000.

To report environmental emergencies call toll free
1-855-944-4888 (24 hours)

Appendix - Nutrient Budget (Imperial Units)

To be completed for all fields that: (A) exceed 60 ppm soil test phosphorus and you cannot meet the phosphorus application rates listed in section 8(2) of the Nutrient Management Regulation OR (B) nitrogen will be applied to any field that exceeds the soil nitrate-nitrogen limits for Nutrient Management Zones referenced in Section 7 of the Nutrient Management Regulation OR

(C) you intend to apply nutrients to Nutrient Management Zone N4 soils. Photocopy additional pages as necessary. Complete Appendix in either metric or imperial units.

Legal Description: _____ **Past Crop:** _____

Crop Year	Crop	Target Yield	Nitrogen Balance Carry Forward	Nitrogen Additions (lb/ac)			Nitrogen Credits (lb/ac)		Nitrogen Removal (lb/ac)		Nitrogen Balance (lb/ac)
		□ bu/ac □ ton/ac □cwt/ac		Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Past Legume Crops*	Past Manure, Sludge or Biosolids Applications	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Target Yield)	
			N	N	N	N	N	N	N	N	N
(*e.g.* 2007)	**Wheat**	**45 bu/ac**	**0**	**0**	**50**		**0**	**20**	**1.5**	**67.5**	**2.5**
Total											

Crop Year	Crop	Average Yield	P_2O_5 Balance Carry Forward	P_2O_5 Additions (lb/ac)			P_2O_5 Removal (lb/ac)		P_2O_5 Balance (lb/ac)
		□ bu/ac □ ton/ac □cwt/ac		Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Average yield)	
			P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5
(*e.g.* 2007)	**Wheat**	**40 bu/ac**	**0**	**0**	**40**		**0.6**	**24**	**16**
Total									

NOTE:

State reason(s) why soil test results exceed soil nitrate-nitrogen limits in Section 7 or why you cannot meet the phosphorus application rates listed in Section 8(2) of the Nutrient Management Regulation (*e.g.* previous manure applications, drought, frost, weeds, insects or disease) and how results will be brought into compliance over time:

_____

_____

_____

_____

*Legume crops include peas, soybeans, dry beans, chickpeas, lupins, clover, vetch, alfalfa, birdsfoot trefoil, sainfoin and lentils.

Appendix - Nutrient Budget (Metric Units)

To be completed for all fields that: (A) exceed 60 ppm soil test phosphorus and you cannot meet the phosphorus application rates listed in section 8(2) of the Nutrient Management Regulation OR (B) nitrogen will be applied to any field that exceeds the soil nitrate-nitrogen limits for Nutrient Management Zones referenced in Section 7 of the Nutrient Management Regulation OR

(C) you intend to apply nutrients to Nutrient Management Zone N4 soils. Photocopy additional pages as necessary. Complete Appendix in either metric or imperial units.

Legal Description: _____ **Past Crop:** _____

Crop Year	**Crop**	**Target Yield**	**Nitrogen Balance Carry Forward**	**Nitrogen Additions (kg/ha)**			**Nitrogen Credits (kg/ha)**		**Nitrogen Removal (kg/ha)**		**Nitrogen Balance (kg/ha)**
		□ kg/ha □ t/ha		Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Past Legume Crops*	Past Manure, Sludge or Biosolids Applications	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Target Yield)	
			N	N	N	N	N	N	N	N	N
(*e.g.* 2007)	**Wheat**	**3.03 t/ha**	**0**	**0**	**56**		**0**	**22.5**	**28.2**	**85.5**	**7**
Total											

Crop Year	**Crop**	**Average Yield**	**P_2O_5 Balance Carry Forward**	**P_2O_5 Additions (kg/ha)**			**P_2O_5 Removal (kg/ha)**		**P_2O_5 Balance (kg/ha)**
		□ kg/ha □ t/ha		Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Average yield)	
			P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5	P_2O_5
(*e.g.* 2007)	**Wheat**	**2.69 t/ha**	**0**	**0**	**45**		**9.8 kg/t**	**26.4**	**18.6**
Total									

NOTE:

State reason(s) why soil test results exceed soil nitrate-nitrogen limits in Section 7 or why you cannot meet the phosphorus application rates listed in Section 8(2) of the Nutrient Management Regulation (*e.g.* previous manure applications, drought, frost, weeds, insects or disease) and how results will be brought into compliance over time:

_____

_____

_____

_____

*Legume crops include peas, soybeans, dry beans, chickpeas, lupins, clover, vetch, alfalfa, birdsfoot trefoil, sainfoin and lentils.