

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 Sustainable 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 Access & Privacy Officer, Box 95, 200 Saulteaux Crescent, Winnipeg MB R3J 3W3; (204) 945-4170.

Please complete this form (all sections) and forward to Water Quality Management Section, Manitoba Sustainable Development, 200 Saulteaux Cr (box 14), Winnipeg MB R3J 3W3
Phone: (204) 945-7096 Fax: (204) 948-2357 Email: nmr@gov.mb.ca

Section B – Animal Unit¹ (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 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
<ul style="list-style-type: none"> • a roadside ditch or an Order 1 or 2 drain[†] 	No direct application to ditches and Order 1 and 2 drains	
<ul style="list-style-type: none"> • a groundwater feature 	15 m (49 feet)	20 m (66 feet)
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • a lake or reservoir designated as vulnerable** 	30 m (98 feet)	35 m (115 feet)
<ul style="list-style-type: none"> • 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)
<ul style="list-style-type: none"> • 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 Manitoba Sustainable Development 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 via the MLI in Google Earth or shapefile format at the following link:

<https://mli2.gov.mb.ca/>

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 # _____

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

**To report environmental emergencies call (204) 944-4888 (24 hours)
Collect calls accepted from within Manitoba.**

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 <input type="checkbox"/> bu/ac <input type="checkbox"/> ton/ac <input type="checkbox"/> cwt/ac	Nitrogen Balance Carry Forward	Nitrogen Additions (lb/ac)			Nitrogen Credits (lb/ac)		Nitrogen Removal (lb/ac)		Nitrogen Balance (lb/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	
(e.g. 2007)	Wheat	45 bu/ac	0	0	50		0	20	1.5	67.5	2.5
Total											

Crop Year	Crop	Average Yield <input type="checkbox"/> bu/ac <input type="checkbox"/> ton/ac <input type="checkbox"/> cwt/ac	P ₂ O ₅ Balance Carry Forward	P ₂ O ₅ Additions (lb/ac)			P ₂ O ₅ Removal (lb/ac)		P ₂ O ₅ Balance (lb/ac)
				Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Average yield)	
			P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O 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 □ kg/ha □ t/ha	Nitrogen Balance Carry Forward	Nitrogen Additions (kg/ha)			Nitrogen Credits (kg/ha)		Nitrogen Removal (kg/ha)		Nitrogen Balance (kg/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 □ kg/ha □ t/ha	P ₂ O ₅ Balance Carry Forward	P ₂ O ₅ Additions (kg/ha)			P ₂ O ₅ Removal (kg/ha)		P ₂ O ₅ Balance (kg/ha)
				Fertilizer	Manure (Available)	Wastewater Sludge or Biosolids	Nutrient content/unit	Nutrient Removal (Nutrient content/unit * Average yield)	
			P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O ₅	P ₂ O 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.