

Minimum Distance Separation I (MDS I) Data Sheet Form 3

This is to be completed and attached to the application when applying for a new non-farm use proposed within 1,000m of an existing livestock facility for Type A land uses (see attachment 1) and within 2,000m of an existing livestock facility for Type B land uses (see attachment 1). Please complete one sheet for each set of livestock facility within these distances.

File number _____	Applicant	Owner of Adjacent Livestock Facility
Name		
Address		
Geographic Township		
Lot		
Concession		
Roll No.		
Telephone		
Fax		
Email		

MEASUREMENT REQUIREMENTS:

- Rezoning or Redesignation: Measure from the shortest distance between the area to be rezoned or redesignated and the livestock occupied portion of the facility.
- New Lot Creation: Measure from the shortest distance between the lot created to the livestock occupied portion of the facility.
- Development on Existing Lot: Measure from the shortest distance between the dwelling or other *structures to be constructed* and the livestock occupied portion of the facility.
- Maximum tillable hectares on the lot with the livestock facilities _____ Ha _____ Ac
Source: _____
- Actual distance from the livestock facility to the proposed use _____ metres _____ feet
Source: _____
- Actual distance from the manure storage to the proposed use _____ metres _____ feet
Source: _____

NOTE: Planning staff may request a survey if the actual setback distance is within close proximity to the required setback distance.

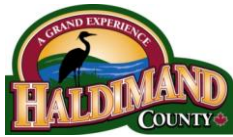
Animal Type or Material (from Table 1, attachment 2)	Description (from Table 1, attachment 2)	Manure types (from table 5, attachment 3)	Total Maximum Housing Capacity	Number per NU (from Table 1, attachment 2)	Existing NU	Factor A (from Table 1, attachment 2)	Factor D (from Table 1, attachment 2)
(Example) Swine	Sows with litter	V3	10	2	$(10/2=5)$ 5	.7	.7
1.							
2.							
3.							
4.							

The above information was supplied by: _____

This information is true to the best of my knowledge.

Signature

Date



Attachment 1: Type A and B Land Uses

Type A Land Uses:

Type A land uses are typically characterized by uses that have a **lower** density of human occupation, habitation or activity.

For the purpose of MDS 1, Type A land uses include applications to rezone or redesignate agricultural lands for *Industrial, agricultural-related or recreational use-low intensity purposes*.

Type A land uses include applications to permit:

- Construction of a *dwelling* on an existing *lot* where the municipality has determined the MDS I should be applied, or the
- Creation of up to three *lots* either by consent or plan of subdivision.

Type B Land Uses:

Type B land uses are typically characterized by uses that have a **higher** density of human occupation, habitation or activity.

For the purpose of MDS 1, Type B land uses include applications to rezone or designate agricultural lands for *residential, recreational use- high intensity, commercial or settlement area* purposes.

Type B land uses include applications to permit:

- Creation of *residential* subdivisions in rural areas, or
- Expansion of a *settlement area*, or
- Creation of *multiple residential* development, or
- The creation of a *lot* which results in a *rural residential cluster*

Attachment 2: Table 1

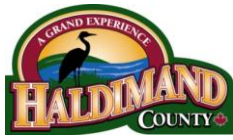


Animal Type or Material	Description	Number per NU	Factor A	Manure or Material Form in Permanent Storage			
				Liquid Manure: Factor D = 0.8 < 18% Dry Matter	Solid Manure: Factor D = 0.7 18 - 100% Dry Matter		
Swine	Sows with litter, dry sows/boars Segregated Early Weaning (SEW)	3.33	1.0	Most systems have liquid manure stored under the barn slats for short or long periods, or in storages located outside	Systems with solid manure inside on deep bedded packs, or with scraped alleys		
	Sows with litter, dry sows or boars (non-SEW)	3.5					
	Breeder gilts (entire barn designed specifically for this purpose)	5					
	Weaners (7 kg – 27 kg)	20	1.1				
	Feeders (27 – 105 kg)	6	1.2				
Dairy Cattle	Milking-age cows (dry or milking)		0.7	Free-stall barns with minimal bedding, or sand bedding, or tie-stall barns with minimal bedding & milking centre washwater added	Tie-stall barns with lots of bedding, or loose housing with deep bedded pack, and with or without outside yard access		
	- Large-framed; 545 kg – 636 kg (e.g. Holsteins)	0.7					
	- Medium-framed; 455 kg – 545 kg (e.g. Guernseys)	0.85					
	- Small-framed; 364 kg – 455 kg (e.g. Jerseys)	1					
	Heifers (5 months to freshening)						
	- Large-framed; 182 kg – 545 kg (e.g. Holsteins)	2					
	- Medium-framed; 148 kg – 455 kg (e.g. Guernseys)	2.4					
	- Small-framed; 125 kg – 364 kg (Jerseys)	2.9					
	Calves (0 – 5 months)		0.7			Free-stall barns with minimal bedding, or sand bedding, or tie-stall barns with minimal bedding & milking centre washwater added	Bedded pens or stalls or heavily bedded calf hutches that are outside
	- Large-framed; 45 kg – 182 kg (e.g. Holsteins)	6					
- Medium-framed; 39 kg – 148 kg (e.g. Guernseys)	7						
- Small-framed; 30 kg – 125 kg (Jerseys)	8.5						
Beef Cattle	Cows, including calves to weaning (all breeds)	1	0.7	N/A	Bedded pack barns with or without outside yard access		
	Feeders (7 – 16 months)	3	0.8				
	Backgrounders (7 – 12.5 months)	3		Slatted floor systems, or barns with minimal bedding & yard scraped to a liquid storage			
	Shortkeepers (12.5 – 17.5 months)	2					



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Animal Type, or Material	Description	Number per NU	Factor A	Manure or Material Form in Permanent Storage	
				Liquid Manure: Factor D = 0.8 Less than 18% Dry Matter	Solid Manure: Factor D = 0.7 18 to 100% Dry Matter
Veal	Milk-fed	6	1.1	Slatted floors or slatted stall system	Heavily bedded pack barns
	Grain-fed	6	0.8		
Goats	Does & bucks (for meat kids; includes unweaned offspring & replacements)	8	0.7	N/A	Heavily bedded pack barns
	Does & bucks (for dairy; includes unweaned offspring & replacements)	8			
	Kids (dairy or feeder kids)	20			
Sheep	Ewes & rams (for meat lambs; includes unweaned offspring & replacements)	8	0.7	N/A	All sheep systems
	Ewes & rams (dairy operation; includes unweaned offspring & replacements)	6			
	Lambs (dairy or feeder lambs)	20			
Horses	Large-framed, mature; > 681 kg (including unweaned offspring)	0.7	0.7	N/A	All horse systems
	Medium-framed, mature; 227 kg – 680 kg (including unweaned offspring)	1			
	Small-framed, mature; < 227 kg (including unweaned offspring)	2			
Chickens	Layer hens (for eating eggs; after transfer from pullet barn)	150	1.0	Birds in cages, manure belts, no drying of manure, water added	Birds in cages, manure belts & drying, or floor systems
	Layer pullets (day olds until transferred into layer barn)	500	0.7		
	Broiler breeder growers (males/females transferred out to layer barn)	300	0.7	N/A	Bedded floors
	Broiler breeder layers (males/females transferred in from grower barn)	100	0.7	N/A	Cage or slatted floor systems
	Broilers on an 8 week cycle	350	0.7	N/A	Bedded floor systems
	Broilers on a 9 week cycle	300			
	Broilers on a 10 week cycle	250			
	Broilers on a 12 week cycle	200			
	Broilers on any other cycle, or if unknown, use 24.8 m ² /NU	24.8 m ²			
Turkeys	Turkey pullets (day old until transferred to layer turkey barn)	267	0.7	N/A	Bedded floor systems
	Turkey breeder layers (males/females transferred in from grower barn)	67			
	Breeder toms	45			
	Broilers (day olds to 6.2 kg)	133			
	Hens (day olds up to 6.2 kg to 10.8 kg; 7.5 kg is typical)	105			
	Toms (day olds to over 10.8 to 20 kg; 14.5 kg is typical)	75			
	Turkeys at any other weights, or if unknown, use 24.8 m ² /NU	24.8 m ²			



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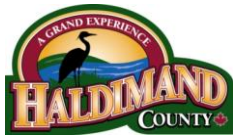
Animal Type, or Material	Description	Number per NU	Factor A	Manure or Material Form in Permanent Storage	
				Liquid Manure: Factor D = 0.8 Less than 18% Dry Matter	Solid Manure: Factor D = 0.7 18 to 100% Dry Matter
Quail	Use 24.8 m ² /NU	24.8 m ²	0.7	N/A	Bedded floor systems
Partridge	Use 24.8 m ² /NU	24.8 m ²			
Pheasants	Use 24.8 m ² /NU	24.8 m ²			
Squab	Use 24.8 m ² /NU	24.8 m ²			
Pheas	Adults (includes replacements & market birds)	13			
Emus	Adults (includes replacements & market birds)	12			
Ostriches	Adults (includes replacements & market birds)	4			
Ducks	Peking	105	0.8	Wire mesh flooring systems	Bedded floor systems
	Muscovy, use 24.8 m ² /NU	24.8 m ²			
Geese	Use 24.8 m ² /NU	24.8 m ²			
Rabbits	Breeding females (including males, replacements & market animals)	40	0.8	N/A	Cage or floor systems
Chinchillas	Breeding females (including males, replacements & market animals)	320			
Fox	Breeding females (including males, replacements & market animals)	25	1.0		
Mink	Breeding females (including males, replacements & market animals)	90			
Bison	Adults (includes unweaned calves & replacements)	1.3	0.7	N/A	Bedded pack barns with outside access or outside confinement areas
	Feeders (170 kg – 477 kg)	4			
Llama	Adults (includes unweaned young & replacements)	5			
	Feeders (45 kg – 86 kg)	16			
Alpaca	Adults (includes unweaned young & replacements)	8			
	Feeders (23 kg – 48 kg)	26			
Wild Boar	Breeding age sows (includes boars, replacements & weaned piglets to 27 kg)	5			
	Finishing boars (27 kg – 86 kg)	7			
					Continued...



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				Liquid Manure: Factor D = 0.8 Less than 18% Dry Matter	Solid Manure: Factor D = 0.7 18 to 100% Dry Matter
Deer	White tailed deer - Adults > 24 mo (including unweaned offspring)	11	0.7	N/A	Bedded pack barns with outside access <u>OR</u> outside confinement areas
	- Feeders	21			
	Red deer - Adults > 24 mo (including unweaned offspring)	7			
	- Feeders	14			
	Elk - Adults > 24 mo (including unweaned offspring)	2			
	- Feeders	6			
	Elk/deer hybrids - Adults > 24 mo (including unweaned offspring)	4			
	- Feeders	10			
	Fallow deer - Adults > 24 mo (including unweaned offspring)	13			
- Feeders	23				
Other livestock not listed in this table	To determine the number per NU, add up the total maximum live weight of animals and divide by the weight of animals per NU in the next column	453.6 kg (1000 lbs)	0.8	All storages with liquid manure	All storages with solid manure
Manure imported to a lot not generating manure ²	Maximum capacity of permanent storages at any time: solid or liquid capacity	19.8 m ³ (700 ft ³)	1.2	All storages with liquid manure	All storages with solid manure
Storages for digestate from an Anaerobic Digester (odours reduced during this process)	Maximum capacity of permanent storages at any time: solid or liquid capacity	19.8 m ³ (700 ft ³)	0.5	All storages with liquid manure	All storages with solid manure

1. On farms with 100 milking-age cows (dry & milking), there are usually about 20 replacement calves and 80 replacement heifers.
 2. Average value for typical types of manures that might be imported to a lot, such as poultry, dairy, beef, swine, horse or other manure.
 N/A = Not Applicable



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Attachment 3: Table 5

Table 5: Permanent Manure or Material Storage Types

Solid *Manure*: 18% dry matter, or more
Liquid *Manure*: Less than 18% dry matter
Digestate: Less than 18% dry matter

Storage Odour Potential	Solid or Liquid System	Inside or Outside Livestock Facility	Number referred to in Table 6 (View images in Appendix A)	Description of permanent manure storages being sited by MDS II, or encroached upon through MDS I application
Very Low	Solid	Inside	V1	Solid, inside, bedded pack (manure accumulates under livestock over time)
		Outside	V2	Solid, outside, covered (cover keeps off precipitation to prevent runoff)
			V3	Solid, outside, no cover, greater than or equal 30% dry matter (manure is dry enough that a flowpath option can be used for runoff control (Nutrient Management Act, 2002))
			V4	Solid, outside, no cover, 18% to less than 30% dry matter, with covered liquid runoff storage (manure not dry enough to soak up precipitation, so a liquid runoff storage needed, but it has a permanent, tight cover)
	Liquid	Inside	V5	Liquid, inside, underneath slatted floor (manure is stored under the animals in the barn)
		Outside	V6	Liquid, outside, with a permanent, tight fitting cover (negative pressure tarp, concrete lid, inflatable dome, etc.)
			V7	Liquid, (digestate), outside, no cover (all manure has been treated through anaerobic digestion, or a similar process that reduces odours)
	Solid	Outside	L1	Solid, outside, no cover, 18% to less than 30% dry matter, with uncovered liquid runoff storage (manure not dry enough to soak up precipitation, so a liquid Low runoff storage needed, but it is uncovered, producing more odour than in V4 above)
	Liquid	Outside	L2	Liquid, outside, with a permanent floating cover (tarps, foam panels, etc.)
Medium	Liquid	Outside	M1	Liquid, outside, no cover, straight-walled storage (usually circular or rectangular concrete, or steel storages)
			M2	Liquid, outside, roof, but with open sides (roof keeps off precipitation, but the open sides allow wind to travel over the manure and carry odours)
High	Liquid	Outside	H1	Liquid, outside, no cover, sloped-sided storage (earthen manure storages, but <u>not</u> earthen runoff storages associated with a solid manure storage which are L1 above)