MDS I — CALCULATION FORM A

	A	B	C	D	E	F	G	H
1	*Livestock/Manure Type*	*Livestock/Manure Description*	**Number/NU (number of** *livestock* **or m² or m³)**	**Manure Type (solid or liquid)**	**Existing Maximum Number of** *Livestock* **(or m² or m³)**	**Existing Maximum Number of** *Nutrient Units*	**Factor A Value**	**Factor D Value**
2								
3								
4								
5								
6								

MDS I — CALCULATION FORM B

	A	B
1	*Design capacity*	*Nutrient Units*
2	**Final Factor A**	
3	**Final Factor D**	
4	**Land use type**	
5	**Final Factor E**	

Step 7: Convert *Livestock*/Manure Information to *Nutrient Units*

1. For each *livestock*/manure type and description outlined on Calculation Form A, calculate how many *Nutrient Unit*s are associated with the *livestock facility*. Determine this by taking the existing maximum number of *livestock* that can be housed, or maximum area that can be used to house *livestock*, or the maximum volume of manure that can be stored in Cell E2 and divide it by the 'Number/NU' in Cell C2. Record this new value in Cell F2. If necessary, repeat this step for each type of *livestock*/manure identified.

2. Next calculate the *design capacity* of all *livestock facilities* on the *lot*. To determine the *design capacity* as expressed in *Nutrient Unit*s, add values in Cells F2 through F6 on Calculation Form A and record this value in Cell B1 on Calculation Form B.

Step 8: Factor A

1. For each *livestock*/manure type and description outlined on Calculation Form A, determine the value of Factor A. For the *livestock*/manure type described in Cells A2 and B2, enter the value of Factor A from Table 1 in Cell G2 on Calculation Form A. For example, if Cells A2 and B2 describe dairy cattle, milking-age cows, large-framed (e.g., Holsteins), record the value 0.7 in Cell G2. If necessary, repeat this step for each type of *livestock*/manure identified.

2. Review Cells G2 through G6. For cells where there is a recorded value for Factor A, if the value for Factor A is the same in every cell, then enter this value in Cell B2 on Calculation Form B. If there is more than one value for Factor A in Cells G2 through G6 on Calculation Form A, then it is necessary to calculate a weighted average for Factor A. For example, if dairy cattle milking-age cows, heifers and calves are recorded, there is no need to calculate a weighted average for Factor A, as the value of Factor A (i.e., 0.7) is the same for all three types of *livestock*. Similarly, if horses are recorded

(large-framed) and sheep (lambs), there is no need to calculate a weighted average for Factor A, as the value of Factor A (i.e., 0.7) is the same for both types of *livestock*. However, if sheep (lambs) and rabbits are recorded, calculate a weighted average for Factor A, as the value of Factor A is different for these types of *livestock*.

3. To calculate a weighted average for Factor A, see Implementation Guideline #30, and use the values for Factor A recorded in Cells G2 through G6 and the number of *Nutrient Unit*s recorded in Cells F2 through F6. When calculating a weighted average, the value of Factor A should not include more than two decimal places and may need to be rounded accordingly. Record the weighted average for Factor A in Cell B2 on Calculation Form B.

Step 9: Factor D

1. For each *livestock*/manure type and description outlined on Calculation Form A, determine the value of Factor D. For the manure type described in Cell D2 enter the value of Factor D from Table 1 in Cell H2. For example, if Cell D2 says liquid manure, record the value 0.8 in Cell H2. If necessary, repeat this step for each type of *livestock*/manure identified.

2. Review Cells H2 through H6. For cells where a value is recorded for Factor D, if the value for Factor D is the same in every cell, then enter this value on Calculation Form B, Cell B3. If there is more than one value for Factor D in Cells H2 through H6 on Calculation Form A, then it is necessary to calculate a weighted average for Factor D.

   For example, if solid manure for all types of *livestock* is recorded in the Calculation Form, there is no need to calculate a weighted average for Factor D, as the value of Factor D (i.e., 0.7) is the same for all types of *livestock*. However, if there is a record for both solid manure and liquid manure for various types of *livestock* on Calculation Form A, calculate a weighted average for Factor D as the type of manure is different for these types of *livestock*.

3. To calculate a weighted average for Factor D, see Implementation Guideline #31, and use the values for Factor D recorded in Cells H2 through H6 and the number of *Nutrient Unit*s recorded in Cells G2 through G6 on Calculation Form A. When calculating a weighted average, the value of Factor D should not include more than two decimal places and may need to be rounded accordingly. Record the weighted average for Factor D in Cell B3 on Calculation Form B.

Step 10: Factor E

1. Now determine Factor E which is based on the type of land use that is proposed as part of the land use planning or building permit application. Based on the information provided by the applicant in Step 2, as well as on direction found in Implementation Guidelines #33 and #34, determine if the proposed use is a Type A or Type B land use. Implementation Guidelines #35 through #38, and direction in local planning documents, may also help in determining if the proposed land use is a Type A or Type B land use.

2. On Calculation Form B, in Cell B4, record if the proposed land use is a Type A or Type B land use. If the proposed use is a Type A land, use Table 4 to enter a value of 1.1 in Cell B5 on Calculation Form B. If the proposed use is a Type B land, use Table 4 to enter a value of 2.2 in Cell B5 on Calculation Form B.