Schedule C: Risk Management Measures – Application of Manure

Please select (by circling Yes, No, or N/A) the measures which are in place or will be implemented (and the date) in order to manage any risk from the activity.

C1 **Manure testing**
Manure is sampled at least once every 5 years.

Type of Measure:	Containment			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C2 **Soil sampling**
Soil is sampled at a minimum every 5 years.

Type of Measure:	Containment			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C3 **Certified personnel**
Manure is applied by a Licensed Custom Applicator.

Type of Measure:	Containment			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C4 **Calibrate and maintain equipment**
Application equipment is checked and/or calibrated by farm personnel.

Type of Measure:	Containment			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C5 **Buffer strips along watercourses**
A vegetated buffer of a minimum of 3 meters is maintained and established from the top of bank of a watercourse or surface water.

Type of Measure:	Containment			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C6 **Crop rotation**
Crop rotation is used to minimize erosion and nutrient use.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C7 **Cover crops**
Cover crops or over-winter crops are used when manure is applied on cropped land in Fall.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C8 **Application rates based on recommendations**
Agronomic rates are provided by a Certified Crop Advisor, Crop Advisor or Agronomist.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C9 **Application rates of nitrogen and phosphorus**
Application rates for Nitrogen and Phosphorus are based on agronomic or crop removal rates.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C10 **Conservation tillage**
No-till, Mulch-till are types of soil cultivation that are implemented and leaves the previous year's crop residue (such as corn stalks or wheat stubble) on fields before and after planting the next crop, to reduce soil erosion and runoff.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C11 **Winter spreading**
Manure is notapplied from December 1 to March 31 or at any time where soil is snow-covered or frozen.

Type of Measure: Containment
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C12 **Direct flow systems**

When direct flow application systems are being used (drag lines) there are two operators in voice or electronic contact with each other at all times. The first operator has a view of the area of land to which the manure is being applied and the second operator is close enough to shut off the system in under one minute after being advised of a problem.

Type of Measure: Containment

Current Practice: Yes No N/A

Will be Implemented: Yes No N/A Implementation Date: _____

C13 **High trajectory guns**

High trajectory guns are not used for manure application.

Type of Measure: Containment

Current Practice: Yes No N/A

Will be Implemented: Yes No N/A Implementation Date: _____

C14 **Setback distance to a municipal well**

There is no application of manure within 100 meters of a municipal well.

Type of Measure: Spatial

Current Practice: Yes No N/A

Will be Implemented: Yes No N/A Implementation Date: _____

C15 **Application setback distance to wells**

There is a minimum application setback of 15 metres for the application of manure from drilled wells (a well that has a depth of 15 metres and a watertight casing of at least 6 metres below ground level)

Type of Measure: Spatial

Current Practice: Yes No N/A

Will be Implemented: Yes No N/A Implementation Date: _____

C16 **Application setback distance to wells**

There is a minimum application setback of 30 metres from any other wells (including dug and sand point wells) for the application of manure will be respected.

Type of Measure: Spatial

Current Practice: Yes No N/A

Will be Implemented: Yes No N/A Implementation Date: _____

C17 **Application setback distance to surface water**
The application of manure does not occur on land within 3 meters of the top of bank of a watercourse or surface water.

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C18 **Application setback distance to surface water**
The application of manure occurs within 13 metres from the top of bank of a watercourse and the materials are applied with injection or placement in a band below the soil surface.

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C19 **Application setback distance to surface water**
The application of manure occurs within 13 metres from the top of bank of a watercourse and the materials are incorporated within 24 hours of application.

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C20 **Application setback distance to surface water**
The application of manure occurs within 13 metres from the top of bank of a watercourse and the materials are applied to land covered with a living crop.

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C21 **Application setback distance to surface water**
The application of manure occurs within 13 metres from the top of bank of a watercourse and the materials are applied to land with a crop residue covering at least 30 percent of the soil.

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C22 **Slope of land considerations**
There is no application of manure if the maximum sustained slope is 25% (1:4) or greater and the field is within 150 metres of surface water (a watercourse?).

Type of Measure: Spatial
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C23 Tile drain outlet locations
All tile outlets have posted signs indicating their locations.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C24 Tile drain monitoring and maintenance
Tile outlets are monitored at the time of application and following application. Appropriate action is taken if needed.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C25 Sampling and Monitoring
Surface water monitoring and inspections are done in intervals following the application of manure. Appropriate action is taken if necessary.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C26 Supervision of filling the manure spreading equipment
The loading of equipment with manure is continuously supervised and done so by trained farm personnel.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C27 Contingency planning
A written spill response plan is in place on the farm to handle spills of manure within the area where the Risk Management Plan applies. This spills response plan is reviewed with the person applying manure in this area.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C28 Weather
Consider local forecasts and weather conditions when deciding when to apply manure.

Type of Measure: Contingency
Current Practice: Yes No N/A
Will be Implemented: Yes No N/A Implementation Date: _____

C29 Record keeping

Records of manure application are kept and outline the date applied, the method of application, the applicator's name and license (if applicable), rate applied and weather conditions.

Type of Measure:	Contingency			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C30 Contingency plan training

Farm personnel are trained on the spills response plan and it is reviewed with them annually.

Type of Measure:	Contingency			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C31 Nutrient management training

A farm staff member has participated in formal nutrient management training facilitated by OMAFRA.

Type of Measure:	Contingency			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

C32 Review maps

The applicator has and has reviewed maps indicating the location of the vulnerable area (provided).

Type of Measure:	Contingency			
Current Practice:	Yes	No	N/A	
Will be Implemented:	Yes	No	N/A	Implementation Date: _____

Please use Schedule L, *Other Risk Management Measures*, if you wish to outline alternate measures not listed on this form.