

Step 6: Project Details for Adding Organic Amendments to Soil (ESIM-PD-A)

1. Which of the following nutrient management best practices do you adhere to? (Check all that apply)
 - Organic amendments and other nutrients are applied at a rate to match crop needs
 - Organic amendments are incorporated within 24 hours of application
 - A sample of organic amendment is taken for nutrient analysis and results are considered in nutrient planning
 - Organic amendments are never applied to frozen or snow-covered soils
 - None of the above

2. What type of organic amendment are you applying? (Select one)
 - Agricultural Source Material (ASM) (Livestock)
 - ASM (Other); specify: _____
 - Non-Agricultural Source Material (NASM), specify: _____

3. Does the organic amendment contain at least 18% dry matter?
 - Yes
 - No

4. When will you apply the organic amendment? (Select one)
 - January to April
 - May to October
 - November to December

5. Over the last five years, how many years have you applied organic amendments to the proposed field? (Select one)
 - Never applied to this field
 - One year
 - Two years
 - Three years
 - More than three years in the last five years

Full Name: _____

FBRN: _____

ESIM-PD-A

6. Are the amendments generated on a farm owned/rented by the same party that owns/rents the field where they will be applied?

Yes

No

7. How many **acres** will benefit from this project? _____

8. What is your soil test organic matter level based on your submitted soil test report? (Select one)

Less than 3%

3% to 7%

Greater than 7%

9. What is the average phosphorus level in the field where you are applying organic amendments? (Select one)

Less than 10 ppm

10 to 20 ppm

21 to 30 ppm

Greater than 30 ppm

10. At what rate will you apply the organic amendment (tons/acre)? _____

11. If an analysis report is available for your organic amendment, provide the following values (if a report is not available, you may use the OMAFRA average values found on Factsheet Agdex #538 for the type of material you intend to apply):

Per cent dry matter: _____

Per cent phosphorus: _____

An analysis is not available yet

12. What crop will be grown after the soil amendment is applied? _____

13. What is the Ontario recommended P_2O_5 rate (kg/t) for the crop to be grown?

(<http://www.omafra.gov.on.ca/english/crops/pub811/pub811ch9.pdf>) _____

14. What is the total rate of P_2O_5 (kg/t) you will be applying (including the soil amendment and ALL other nutrient sources)? _____

Full Name: _____

FBRN: _____

15. How do you determine the amount of phosphorus, potassium (P, K) or other nutrient to apply? (From Worksheet 16, Question 3 in your 4th edition EFP workbook) (Select one)

No soil tests are done, **and** a rate of fertilizer greater than crop removal is used every year

No soil tests are done, **and** rate of fertilizer used is consistent with crop removal rates over crop rotation

Amount of fertilizer needed is determined from last soil test of each field, **and** a low rate of fertilizer (e.g. seed applied starter) is used even when the soil tests recommend it is not needed

Amount of fertilizer needed is determined from last soil test of each field, **and** rate used is based on best available data (e.g. OMAFRA soil test recommendation tables, or NMAN)

16. Will you make adjustments to the amount of fertilizer needed when applying manure, compost, digestate or biosolids? (From Worksheet 16, Question 5 in your 4th edition EFP workbook. If organic amendments were not previously applied on your farm and marked n/a in your workbook, select how you will adjust the amount of fertilizer moving forward) (Select one)

Amount of fertilizer is not reduced when manure, compost, digestate or biosolids are used

Amount of fertilizer is reduced by a small amount when manure, compost, digestate or biosolids are used

Amount of fertilizer is reduced by the amount of available nutrient added by manure, compost, digestate or biosolids **and** manure applications are estimated (spreader not calibrated)

Amount of fertilizer is reduced by the amount of available nutrient added by manure, compost, digestate or biosolids **and** manure applications are confirmed (e.g. spreader calibrated) OR nutrients are applied according to a formal nutrient management plan.

17. Are you applying nutrients on a field with adjacent surface water and if so, do you have a permanently vegetated buffer greater than 3 metres wide alongside all surface water on the location where you will be spreading organic amendments? (Select one)

Yes, applying adjacent to surface water with a permanently vegetated buffer greater than 3 metres in place

Yes, applying adjacent to surface water, but no permanently vegetated buffer is in place OR the permanently vegetated buffer is less than 3 metres

No, not applying adjacent to surface water

18. At what distance from surface water do you apply nutrient to crops? (From Worksheet 16, Question 9 in your 4th Edition EFP workbook) (Select one)

Surface applied less than 13 metres (43 ft) **OR** Injected or placement in a band below the soil surface less than 3 metres (10 ft.) **OR** Materials are incorporated within 24 hours of application, less than 3 metres (10ft) **OR** Materials are applied to land covered with a living crop, less than 3 metres (10 ft.) **OR** Materials are applied to land with a crop residue cover of at least 30 per cent, less than 3 metres (10 ft.)

Surface applied more than 13 metres (43 ft) **OR** Injected or placement in a band below the soil surface more than 3 metres (10 ft.) **OR** Materials are incorporated within 24 hours of application, more than 3 metres (10ft) **OR** Materials are applied to land covered with a living crop, more than 3 metres (10 ft.) **OR** Materials are applied to land with a crop residue cover of at least 30 per cent, more than 3 metres (10 ft.).

Full Name: _____

FBRN: _____

Step 7: Additional Funding for Systems Approach

This section is for applicants who would like to be considered for the Systems Approach Funding. To be considered, you must show how the project you are applying for will be complemented or enhanced by the on-going maintenance of previously implemented best management practices (BMPs). If this applies to you, please answer the questions for at least 3 of the BMPs below. If you provide satisfactory answers for at least 3 BMPs, you may receive an additional 5 percent in cost-share funding.

| NUTRIENT MANAGEMENT AND SOIL HEALTH PLANNING | |
|--|-------------------------------|
| What year did you complete at least one of the following plans: Crop Nutrient Plan Nutrient Management Plan Riparian Health Assessment Soil Erosion Plan Water/Wastewater Management Plan | |
| What type of advisor did you use for your planning? | |
| Does the plan contribute to your ongoing production practices? | Yes No |
| What township was the plan implemented in? | |
| COVER CROPS | |
| Do you use cover crops annually? | Yes No |
| If no, what was the most recent year you used cover crops? | |
| How many acres do you use cover crops on annually? | acres owned acres rented |
| Have you used a cover crops species that flowers? | Yes No |
| If so, did you allow the cover crops to flower before termination? | Yes No |
| Are your cover crops typically left in the field over winter? | Yes No |
| What township was this implemented in? | |
| RIPARIAN BUFFER STRIPS | |
| What is the length and width of your riparian buffer strip? | metres length metres width |
| What year did you plant your most recent buffer strip? | |
| What township was this implemented in? | |

| WINDBREAKS AND WINDSTRIPS | |
|--|-----------------------------|
| How many acres of fields are protected by windbreaks/wind strips: (e.g., 50 acre field with windbreaks = 50 acres) | acres owned acres rented |
| What year did you last plant a windbreak or wind strip? | |
| Do the plants in the windbreak or wind strip provide food sources (such as flowers), nesting sites or host plants for pollinators? | Yes No |
| Do you perform annual maintenance on your windbreak(s)/wind strip(s)? | Yes No |
| What township was this implemented in? | |
| FRAGILE LAND RETIREMENT | |
| Please indicate the number of acres of fragile land you have retired in the last 5 years | acres |
| Do the plants on your retired fragile land provide food sources (such as flowers), nesting sites or host plants for pollinators? | Yes No |
| What township was this implemented in? | |
| STRUCTURAL EROSION CONTROL | |
| When was the erosion control structure implemented? | |
| Was the erosion control structure designed by an engineer? | Yes No |
| What township was this implemented in? | |
| NUTRIENT RECOVERY FROM WASTEWATER OR WASH WATER | |
| How many nutrient unit equivalents do you contain or manage? | |
| How many litres of water are treated and/or recycled? | |
| What year was the water recovery system installed in? | |
| What township was this implemented in? | |

| TILLAGE AND NUTRIENT APPLICATION EQUIPMENT MODIFICATIONS | |
|---|--|
| How many acres are under no-till practices? | acres owned acres rented |
| How many years have no-tillage practices been implemented? | |
| How many acres are under strip-till practices? | acres owned acres rented |
| How many years have strip-tillage practices been implemented? | |
| Do you have 3 or more crops in your rotation? | Yes No |
| What township was this implemented in? | |
| EQUIPMENT MODIFICATIONS TO REDUCE SOIL COMPACTION | |
| Do you have an on-the-go tire inflation system? | Yes No |
| If yes, when was the system installed? | |
| Do you use high flotation tires to reduce soil compaction? | Yes No |
| If yes, how many acres are impacted through use of this equipment? | acres owned acres rented |
| What township was this implemented in? | |
| ADDING ORGANIC AMENDMENTS TO SOIL | |
| How many acres do you apply organic amendments to? | acres owned acres rented |
| What type of material do you apply to your fields? (Check all that apply) | Manure Biosolids Compost Anaerobic digestate Other, specify: |
| Is adding organic amendments a regular annual practice for your farm? | Yes No |
| If no, what was the most recent year you used this practice? | |
| What township was this implemented in? | |

| EQUIPMENT MODIFICATIONS TO IMPROVE MANURE APPLICATION | |
|--|---|
| How did you modify equipment to better apply organic amendments? (Check all that apply) | Direct injection Below canopy Incorporation or pre-tillage Better rate and flow accuracy Safety controls and monitoring |
| What was the most recent year you modified equipment for the application of organic amendments? | |
| Since the equipment was modified, has it been used in each year of production? | Yes No |
| How many acres are impacted by the use of this equipment | acres |
| What township was this implemented in? | |
| MANURE STORAGE IMPROVEMENTS | |
| Has increasing storage capacity helped reduce soil compaction by allowing you to apply manure at the right time? | Yes No |
| Has increasing storage capacity helped to eliminate the need to spread manure on frozen or snow-covered ground? | Yes No |
| What year did you increase your manure storage capacity to a minimum of 240 days? | |
| Did increasing storage capacity allow you to increase nutrient use efficiency? | Yes No |
| What township was this implemented in? | |
| RUNOFF CONTROL FOR LIVESTOCK FACILITIES | |
| Has a livestock yard been roofed or a covered yard been built within the last 5 years to prevent runoff? | Yes No |
| Have you installed any of the following within the last five years? | Engineered livestock runoff vegetated filter strip Constructed wetland |
| Have impermeable surfaces and concrete curb walls been installed or included to direct runoff to storage or treatment areas? | Yes No |
| Did you create an upstream diversion around existing farmyards? (e.g., surface water diversions, berms, surface inlet [catch basin], eaves troughs on existing livestock buildings to divert clean water from entering the livestock yard) | Yes No |
| Did you build storage for runoff or silage leachate? | Yes No |
| Did you create observation and shut-off stations and/or plug tile drains within 15 meters of livestock facilities | Yes No |
| How many nutrient units are managed by runoff control? | |
| What township was this implemented in? | |